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GenCore version 5.1.3
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OM protein - protein search, using sw model

February 26, 2003, 15:03:23 ; Search time 17 Seconds (without alignments) 378.883 Million cell updates/sec Run on:

US-09-506-978-1 391 1 GGFGGLGGRGKCPSNEIFSR......CRLGYLRNKKVCVPRSKCG 67 Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283224 seqs, 96134422 residues Searched:

283.224 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	hypothetical prote hypothetical prote hypothetical prote alpha tectorin - m zonadhesin - mouse protein B028 1.2 [hypothetical prote hypothetical prote hypothetical prote hypothetical prote hypothetical prote hypothetical prote hypothetical prote yon Willebrand fac alpha tectorin - c scavenger receptor protein C10G8 4 [i IgG Fc binding prohypothetical prote hypothetical prote mucin z, intestina mucin, submaxillar chymotrypsin/elast	
H	T21654 T27318 T27319 T30197 T42215 H89044 T42293 T24294 T24294 T24294 T3609 T16509 T16509 T16509 T25513 T27604 T25513 T27609 T25610 S52093 T15610 S52093 T15610 S72093 T15610	
Length DB	245 2 561 2 626 2 5155 2 53155 2 53166 2 166 2 9802 2 9802 2 9802 2 137 2 1023 2 1024 2 1025	
$^{ry}_{ch}$	2000 2000 2000 2000 2000 2000 2000 200	
Score	113 118 111 1115 1115 1115 1115 1115 111	
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ZK353.2 protein -	hypothetical proto	integumentary muni	hvnothotical proto	chumotruscia /olast	hypothotical proto	hypothetical profe	himothetical prote	ilypurierical proce	merallothionein 10	nypothetical prote	nypothetical prote	hypothetical prote	COP proton - diotor	TTDA TITOTOTA NOT	gene G4R protein -	otogelin - mouse
S44658 A33837	T23389	T30886	T32003	508572	T21773	T21772	T15611	520716	07.4TC	#07#C#	123/00	T28623	D72175	Dagoso	00000	T42214
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99	100	1506	490	63	915	927	169	7.5	2195	217	9 6	34 B	349	310		2910
20.6	20.3	20.3	19.9	19.8	19.8	19.8	19.7	19.6	19.6	10.3		19.3	19.3	19.3	1 1	19.3
80.5	79.5	79.5	78	77.5	77.5	77.5	77	76.5	76.5	75.5	1 0	0.07	75.5	75.5		٥.٥/
10	32	~				37	_	_	_							

ALIGNMENTS

RESULT 1	721654 hypothetical protein F32D8.3 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 04-Mar-2000 C;Accession: T21654 B:Willinger	Submitted to the EMBL Data Library, June 1996 A:Reference number: 219454 A:Accession: T21654	A:Status: preliminary; translated from GB/EMBL/DDBJ A:Molecule type: DNA A:Residues: 1-245 < WIL>	A;Cross-references: EMBL:274031; PIDN:CAA98455.1; GSPDB:GN00023; CESP:F32D8.3 A;Experimental source: clone F32D8 C;Genetics:	A;Gene: CESP:F72D8.3 A;Map position: 5 A;Introns: 61/1; 83/3 C;Superfamily: Caenorhabditis elegans hypothetical protein F32D8.3	Query Match Best Local Similarity 43.1%; Pred. No. 4.4e-06; Matches 28; Conservative 7; Mismatches 20; Indels 10; Gaps 4;	QY 6 LGGRCKCPSNEIFSRCDGRCQRFCPNVVPRPLCIKICAPGCVCRLGYLRNKKWCV 61	Qy 62 -PRSK 65 : Db 112 CPRTK 116	RESULT 2 T27318 hypothetical protein Y69H2.3a - Caenorhabditis elegans C;Species: Caenorhabditis elegans	C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999 C;Accession: T27318 R;McMurray, A.	submitted to the EMBL Data Library, August 1997 A:Reference number: 220343 A:Accession: T27318	A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: DNA A;Residues: 1-561 <wil></wil>	A;Cross references: EMBL:298877; PIDN:CAB54472.1; GSPDB:GN00023; CESP:Y69H2.3a A:Experimental source: clone Y69H2 C;Genetics:	A;Gene: CESP:Y69H2.3a A;Map position: 5
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A,Tittle: Genome sequence of the nematode C. elegans: a platform for investigating bio A,Reference number: A75000; MUID:99069613; PMID:9851916
A;Note: see websites genome.wustl.edu/gsc/C_elegans/ and www.sanger.ac.uk/Projects/C_A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A,Cross-references: GB:chr_V; PIDN:AAB65990.1; PID:92315490; GSPDB:GN00023; CESP:B023
C;Genetics:
R;Gao, Z.; Garbers, D.L.
J. Biol. Chem. 273, 3415-3421, 1998
A;Title: Species diversity in the structure of zonadhesin, a sperm-specific membrane
A;Reference number: Z22080; MUID:98123114; PMID:9452463
A;Accession: T42215
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C.Species: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
                                                                                                                                                     A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-5376 <GAO>
A;Cross-references: EMBL:U97068; NID:g3327420; PID:g3327421; PIDN:AAC26680.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Species: Caenorhabditis elegans
C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 10-May-2001
C;Accession: H89044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4743 KCPANSLYTHCLPTCLPSCSN--PDGRCEGTSHKAPSTCREGCVCQPGYLLN-KDTCVHK 4799
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28.9%; Score 113; DB 2; Length 5376; 37.5%; Pred. No. 0.004; Live 8; Mismatches 22; Indels 10
                                                                                                                                                                                                                                                                                                                                                                A; Description: functions in multiple cell adhesion processes A;Note: found exclusively on the apical region of the sperm head C; Keywords: cell adhesion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28.5%; Score 111.5; DB 2; 36.8%; Pred. No. 0.00042; Live 11; Mismatches 25;
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R;Steward, C
submitted to the EMBL Data Library, October 1996
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Matches 24; Conservative
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Matches 25; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Status: preliminary A; Molecule type: DNA
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C;Species: Mus musculus (house mouse)
C;Date: 22-Oct-1999 #sequence_revision 22-Oct-1999 #text_change 21-Jul-2000
C;Date: 22-Oct-1999 #sequence_revision 22-Oct-1999 #text_change 21-Jul-2000
C;Caccession: T30.97
C;Caccession: Taylor # Reene, J.N.; Richardson, G.P.
J. Biol. Chem. 272, 8791-8801, 1997
J. Biol. Chem. 272, 8791-8801, 1997
A;Title: The mouse tectorins. Modular matrix proteins of the inner ear homologous to com A;Reference number: 220771; MuID:97236843; PMID:9079715
A;Accession: T30197
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A:Note: non-collagenous protein only expressed in the inner ear, by cells both in and su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Introns: 183/1; 247/1; 312/1; 353/1; 383/1; 429/1; 453/2; 522/1; 546/2; 586/3
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A; Residues: 1-626 <WILL.
A; Cross-references: EMBL: 298877; PIDN: CAB54473.1; GSPDB:GN00023; CESP:Y69H2.3b
A; Experimental source: clone Y69H2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: mRNA
A;Residues: 1-2155 <LEG>
A;Cross-references: EMBL:X99805; NID:g1915908; PIDN:CAA68138.1; PID:g1915909
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C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 03-Dec-1999
                                                                                                                                                                                                                                                                                                                                                                   hypothetical protein V69H2.3b - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
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                                                                   Length 561;
                                                             Ch 30.2%; Score 118; DB 2; Length 56: Length 56: 1. Similarity 36.8%; Pred. No. 0.00024; 21; Conservative 11; Mismatches 23; Indels
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36.8%; Pred. No. 0.00026;
tive 11; Mismatches 23.
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A; Accession: T27319
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Upporterical protein Casello - Caenorhabdilis elegans
C)Species: Caenorhabdilis elegans
C)Species: Caenorhabdilis elegans
C)Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 20-Sep-1999
C)Accession: T15609
R)Bradshaw, H.
Submitted to the EMBL Data Library, February 1996
A)Description: The sequence of C. elegans cosmid C25E10.
A)Reference number: 218376
A)Accession: T15609
A)Status: preliminary; translated from GB/EMBL/DDBJ
A)Recorded type: DNA
A)Residues: 1-137 ABRA
A)Residues: 1-137 ABRA
A)ACCESS-references: EMBL:U50311; NID:g126295; PID:g1226303; PIDN:AAA92313.1; CESP:C2
A)Experimental source: strain Bristol N2
C)Genetics: A)Construction R)Construction R)Cons
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A;Cross-references: EMBL:U29377; NID:g868173; PID:g868180; PIDN:AAA68717.1; CESP:KO5F
A;Experimental source: strain Bristol N2
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Apporthetical protein K05F1.10 - Caenorhabditis elegans Cispecies: Caenorhabditis elegans Cispecies: Caenorhabditis elegans Cispecies: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 20-Sep-1999 CiAccession: T1674 Riwohldmann, P. Subhidmann, P. Subhidmann, P. Subhidmann, P. Subhidmann, P. Subhidmann, P. Subhidmann, P. Sabrottion: The sequence of C. elegans cosmid K05F1. Air Reference number: 218537 Air Reference number: 218537 Air Recession: T16574 Air Subhidmany: preliminary: translated from GB/EMBL/DDBJ
                                                                                                                                                        11 KCPSNEIFSRCDGRC-----QRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCV 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                          17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25.6%; Score 100; DB 2; Length 140; 32.8%; Pred. No. 0.005; tive 10; Mismatches 25; Indels
                      18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 100.5; DB 2; Length
Pred. No. 0.0044;
7; Mismatches 26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypothetical protein C25E10.8 - Caenorhabditis elegans
                      9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25.7%;
ilarity 36.8%;
Conservative
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                 22; Conservative
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nes 21; Conserva
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Best Local Similarity
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A; Introns: 31/3; 77/2
                                                                                                                                                                                                                                                                        62 PRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           112 PSHC 115
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CiSpecies: Sus scrofa domestica (domestic pig)
CiSpecies: Sus scrofa domestica (domestic pig)
CiSpecies: Os-Sep-2000 #sequence_revision 02-Sep-2000 #text_change 02-Sep-2000
CiAccession: T3402
CiAccession: 
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                                                                                                                                                                                                         A.Cross-references: EMBL:281110; PIDN:CAB03259.1; GSPDB:GN00023; CESP:T01D3.3a A.Experimental source: clone T01D3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: EMBL:281110; PIDN:CAB03260.1; GSPDB:GN00023; CESP:T01D3.3b
A;Experimental source: clone T01D3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: mRNA
A;Residues: 1-2476 - CHAR>
A;Cross-references: EMBL:U40024; NID:g1066465; PID:g1066466; PIDN:AAC48486.1
A;Experimental source: strain Meishan; testis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hypothetical protein T01D3.3b - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: T24294
R;Steward, C.
submitted to the EMBL Data Library, October 1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12 CPSNEIFSRCDGRCQRFCPNVVPKPLC-IKICAPGCVCRLGYLR---NKKKVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Map position: 5
A:Introns: 74/1; 126/1; 161/2; 221/1; 268/1; 347/2; 640/1; 820/3; 919/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Description: may be involved in sperm adhesion to the zona pellucida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 109.5; DB 2; Length 802;
Pred. No. 0.0021;
7; Mismatches 24; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28.0%; Score 109.5; DB 2; Length 949; 39.0%; Pred. No. 0.0024; tive 7; Mismatches 24; Indels 5.
                                                                                         A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-802 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Status: preliminary; translated from GB/EMBL/DDBJ
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A; Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                        A:Map position: 5
A:Introns: 74/1; 121/1; 200/2; 493/1; 673/3; 772/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28.0%;
39.0%;
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33.3%;
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Matches 23; Conservative
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Best Local Similarity 39.03
Matches 23; Conservative
A; Reference number: 219870
A; Accession: T24293
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A; Accession: T24294
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C;Function:
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T24294
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A; Molecule type: mRNA A; Mol. 771-788, A, 790-803, S, 805-873;1289-1471, D', 14 A; Residues: "WA',739, C',744-769, H',771-788, A',790-803, S', 805-873;1289-1471, D',14 A; Note: the authors translated the codon TCG for residue 2168 as Cys R; Shelton-Inloes, B.B.; Titani, K.; Sadler, J.E. Biochemistry 25, 3164-3171, 1986 A; Title converse for human von Willebrand factor reveal five types of repeated A; Reference number: A90504; MUID:86269894; PMID:3488076 A; Recession: A90504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: mRNA
A; Residues: 781-788, 'A', 790-1424 <SHE>
A; Note: 852-61n, 857-Asp, and 1381-Thr were also found
R; Ginsburg, D: Handin, R.I.; Bonthron, D.T.; Donlon, T.A.; Bruns, G.A.P.; Latt, S.A.
Science 228, 1401-1406, 1985
A; Title: Human von Willebrand factor (vWF): isolation of complementary DNA (cDNA) clo
A; Reference number: A44178; MUID:85244588; PMID:3874428
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A; Cross-references: EMBL:K03028; NID:g340308; PIDN:AAA61293.1; PID:g340309
R; Cross-references: EMBL:K03028; NID:g340308; PIDN:AA61293.1; PID:g340309
R; Verweij, C.L.; de Vries, C.J.M.; D1stel, B.; van Zonneveld, A.J.; van Kessel, A.G.; NITelen Acids Res. 13, 4699-4717, 1985
A; Title: Construction of cDNA coding for human von Willebrand factor using antibody p A; Reference number: S07363; WUID:85269603; PMID:3875078
                                                 R;Sadler, J.E.; Shelton-Inloes, B.B.; Sorace, J.M.; Harlan, J.M.; Titani, K.; Davie, Proc. Natl. Acad. Sci. U.S.A. 82, 63394-63398, 1985
A;Title: Cloning and characterization of two cDNAs coding for human von Willebrand fa A;Reference number: A94066; WUID:86016708; PMID:2864688
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A Molecule type: mRNA
A; Residues: 2731-2813 < VE3>
A; Cross-references: EMBL:XO2672; NID:g37939; PIDN:CAA26503.1; PID:g37940
B; Lynch, D.C.; Zimmernan, T.S.; Collins, C.J.; Brown, M.; Morin, M.J.; Ling, E.H.;
Cell 41, 49-56, 1985 man, T.S.; Collins, C.B.; Minner and Fartor: althorization
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Y.; Wagner, D.D.; Ginsburg, D.; Bonthron, D.; Ohlsson-Wilhelm,
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A;Residues: 764-773;2803-2813 <CHO>
K;Residues: 764-773;2803-2813 <CHO>
K;Dent, J.A.; Berkowitz, S.D.; Ware, J.; Kasper, C.K.; Ruggeri, Z.M.
K;Dent, J.A.; Berkowitz, S.D.; Ware, J.; Kasper, C.K.; Ruggeri, Z.M.
Proc. Natl. Acad. Sci. U.S.A. 87, 6306-6310, 1990
A;Title: Identification of a cleavage site directing the immunochemical detection A;Reference number: A36013; MUID:90349604; PMID:2385594
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A; Residues: 764-788' A', 790-1471, 'D', 1473-2813 <TIT>
A; Note: 789-Thr was also found
R; Chopek, M.W.; Girma, J.E.; Pujikawa, K.; Davie, E.W.; Titani, K.
Biochemistry 25, 3146-3155, 1986
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R;Titani, K.; Kumar, S.; Takio, K.; Ericsson, L.H.; Wade, R.D
Biochemistry 25, 3171-3184, 1986
A;Title: Amino acid sequences of human von Willebrand factor.
A;Reference number: A90505; WUID:86269895; PMID:3524673
A;Accession: A90505
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A; Molecule type: mRNA
A; Residues: 2621-2813 <GIN>
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A. M. M. Lecule type: MRNA
A. Residues: 2731-2813 <LYN>
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A; Residues: 1606-1617 < DEN>
R; Fay, P.J.; Kawai, Y.; Wagr
Science 232, 995-998, 1986
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A; Residues: 576-590 <FAY>
         A; Residues: 23-56 <SH3>
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A. Cross-references: EMBL: M2864
B. Boothron, D.: Orkin, S.H.
Eur. J. Blochem. 171, 51-57, 1988
A. Title: The human von Willebrand factor gene. Structure of the 5' region.
A. Reference number: $02377; MUD: 88111704; PMID: 2828057
A. Residue type: DNA
A. Residues: 1-17 < K80.2>
A. Title: Human von Willebrand factor gene and pseudogene: structural analysis and differ A. Reference number: A37139; MUID: 91105089; PMID: 1988024
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A.Residues: 990-1947 <MAD>
A.Residues: 990-1947 <MAD>
A.Residues: 990-1947 <MAD>
A.Cross-references: GB-M60675; NID:g340357; PIDN:AA461295.1; PID:g553810
A.Cross-references: GB-M60675; NID:g340357; PIDN:AA61295.1; PID:g553810
A.Rote: the authors translated the codon CGC for residue 156 as Gln
A.Rote: the authors translated the codon CGC for residue 156 as Gln
A.Ricci Ins., C.J.; Underdahl, J.P.; Levene, R.B.; Ravera, C.P.; Morin, M.J.; Dombalagian, Proc. Natl. Acad. Sci. US.A. 84, 4393-4397, 1987
A.Rici Ins., C.J.; MID:87260814; PMID:3496594
A.Reference number: 823676
A.Molecule type: DNA
A.Residues: 2731-2813 <COL>
                                                                                                                                     C; Species: Homo sapiens (man)
C; Date: 04-Dec-1986 #sequence_revision 30-Jun-1993 #text_change 22-Jun-1999
C; Date: 04-Dec-1986 #sequence_revision 30-Jun-1993 #text_change 22-Jun-1999
C; Accession: A34480; S02377; A37139; S23676; A25298; A25469; A25566; S23618; S23645; A94
R; Mancuso, Tuley, E.A.; Westfield, L.A.; Worrall, N.K.; Shelton-Inloes, B.B.; Sora
J; Biol, Cham. 264, 19514-19527, 1989
A; Title: Structure of the gene for human von Willebrand factor.
A; Reference number: A34480; MUID: 90062044; PMID: 2584182
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BMBO J. 5, 1839-1847, 1986
A;Title: Full-length von Willebrand factor (vWF) CDNA encodes a highly repetitive protei
A;Reference number: A91044; WUID:87004550; PMID:3019665
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R; Shelton-Inloes, B.B.; Broze Jr., G.J.; Miletich, J.P.; Sadler, J.E.
Biochem. Biophys. Res. Commun. 144, 657-665, 1987
A; Title: Evolution of human von Willebrand factor: CDNA sequence polymorphisms, repeated A; Reference number: $23618; MUID:87213253; PMID:3495266
A; Accession: $22618
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R;Bonthron, D.; Orr, E.C.; Mitsock, L.M.; Ginsburg, D.; Handin, R.I.; Orkin, S.H.
Nucleic, Acids Res. 14, 7125-7127, 1986
A;Title: Nucleotide sequence of pre-pro-yon Willebrand factor cDNA.
A;Reference number: A25298; MUID:87016349; PMID:3489923
A;Accession: A25298
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A;Accession: S23645
A;Molecule type: protein
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A;Note: this sequence has been revised in reference A91056
R;Verweij, C.L.; Diergaarde, P.J.; Hart, M.; Pannekoek, H.
EMBO J. 5, 3074, 1986
                                                                                        von Willebrand factor precursor - human
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A; Residues: 1-470,'V',472-2813 <BON>
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A; Residues: 1021-1030 <VE2>
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A; Accession: A25366
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A; Map position: 12p13.3-12p13.2

A; Map position: 12p13.3-12p13.2

A; Introns: 19/1; 74/1; 108/2; 108/2; 194/1; 29/1; 333/1; 370/2; 386/1; 431/3; 478/1; 51

A; 1724/1; 171/1; 1819/1; 1814/1; 1888/3; 1948/1; 2021/3; 2086/1; 2266/3; 236

C; Superfamily: von Willebrand factor; von Willebrand factor type A repeat homology; von C; Reywords: blood coagulation; cell binding; connective tissue; disulfide bond; duplicat F; 1-22/Domain: signal sequence #status predicted <SIG>

F; 23-763/Product: von Willebrand antigen II #status predicted <MAI>
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Hear. Res. 130, 62-74, 1999
A;Title: Chick alpha tectorin : molecular cloning and expression during embryogenesis.
A;Reference number: Z20783; MUID:99251817; PMID:10320099
A;Accession: T30243
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C;Date: 02-Sep-2000 #sequence_revision 02-Sep-2000 #text_change 02-Sep-2000
C;Accession: T30243
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F:387-745/Domain: type D repeat 2 <DD2>
F:698-700/Region: cell attachment (R-G-D) motif
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F:2296-2330/Domain: type B repeat 1 <VBL>
F:2340-2365/Domain: type B repeat 2 <VBZ>
F:2375-2399/Domain: type B repeat 3 <VBZ>
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26.0%;
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A; Residues: 1-2120 <COU>
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A,Title: Origins of immunity: transcription factors and homologs of effector genes of A,Reference number: Z18253; MUID:99328904; PMID:10398804
A,Accession: T17MDC
A,Status: preliminary: translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein C1008.4 [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: 10-May-2001 #sequence_revision 10-May-2001 #text_change 10-May-2001
C;Accession: C89046
R;anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating blo A;Reference number: A75000; MUID:99069613; PMID:9851916
A;Note: see websites genome.wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/C_A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; A;Accession: C89046
A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; A;Residues: 1-98 <STO>
A;Residues: A;Residues: 1-98 <STO>
A;Residues: 1-98 <STO>
A;Residues: A;Residues: 1-98 <STO>
A;Residues: A;Residu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: mRNĀ
A;Residues: 1-1036 <PAN>
A;Cross-references: EMBL:AF076513; NID:94164530; PID:94164531; PIDN:AAD05493.1
Gaps
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Pred. No. 0.013;
7; Mismatches 29; Indels
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GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

February 26, 2003, 15:03:22 ; Search time 29 Seconds (without alignments) 95.825 Million cell updates/sec Run on:

Title:

US-09-506-978-1 391 1 GGFGGLGGRGKCPSNEIFSR......CRLGYLRNKKKVCVPRSKCG 67 Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

112892 segs, 41476328 residues Searched:

112892 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_40:* Database : Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	1	mus m	homc	s sns	apis		P80012 bos taurus	P57999 oryctolagus		P04275 homo sapien		P98092 bombyx mori	Q03376 chironomus		P34625 caenorhabdi		Q60751 mus musculu	073559 cowpox viru	ď		O62554 mytilus edu	Q8uya7 camelpox vi	P56677 mus musculu	P34015 variola vir	Q02817 homo sapien	Q05895 mus musculu				P29825 myxoma viru	homo		116 sus s	P19398 ascaris suu
OTTAGE	ID		ZAN_MOUSE	ZAN_HUMAN	ZAN_PIG	AMCI_APIME	VWF_CANFA	VWF_BOVIN	ZAN_RABIT	A62F_DROME	VWF_HUMAN	VWF_PIG	HMCT_BOMMO	BAR3_CHITE	ICE1_ASCSU	YOJ2_CAEEL	IG1R_RAT	IG1R_MOUSE	CRMB_COWPX	ICE2_ASCSU	MT1A_MYTED	MT1B_MYTED	CRMB_CAMPS	ST14_MOUSE	CRMB_VARV	MUC2_HUMAN	TSP3_MOUSE	TENX_HUMAN	MT_PERFL	YN81_CAEEL	VT2_MYXVL	TSP3_HUMAN	IG1R_HUMAN	TENA_PIG	ITR1_ASCSU
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P80247 mytilus edu P09862 oncorhynchu	P25127 esox lucius Q10731 bombyx mori	Q62799 rattus norv	P80249 mytilus edu	P07216 pleuronecte	P55945 pseudopleur	P98158 rattus norv	P26372 ovis aries	P47944 homo sapien	Q10043 caenorhabdi
MT12_MYTED	MT_ESOLU FPIF_BOMMO	ERB3_RAT	MT14_MYTED	MT_PLEPL	MT_PSEAM	LRP2_RAT	KRUC_SHEEP	MT4_HUMAN	YRP1_CAEEL
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18.0 17.6	17.6 17.6	17.6	17.5	17.4	17.4	17.4	17.3	17.1	17.1
70.5	69	69	68.5	68	68	68	67.5	49	67
34 35	36 37	38	39	40	41	42	43	44	45

ALIGNMENTS

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Gao 2., Harumi T., Garbers D.L.;
"Chromosome localization of the mouse zonadhesin gene and the human zonadhesin gene (ZAN).";
Genomics 41:119-122(1997).
-!- FUNCTION: BINDS IN A SPECIES-SPECIFIC MANNER TO THE ZONA PELLUCIDA OF THE EGG. MAY BE INVOLVED IN GAMETE RECOGNITION AND/OR SIGNALING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBUNIT: PROBABLY FORMS COVALENT OLIGOMERS.
SUBCELLULAR LOCATION: TYPE I MEMBRANE PROTEIN, EXCLUSIVELY ON THE
                                                                                                                                                                                                                                                                                                                                                                                                                            Score 113; DB 1; Length 5376;
Pred. No. 0.00034;
8; Mismatches 22; Indels 10; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glockner G. Scherer S., Schattevoy R., Boright A., Weber J., Tsui L.C., Rosenthal A.; "Large-scale sequencing of two regions in human chromosome 7q22: analysis of 650 kb of genomic sequence around the EPO and CUTLI loci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 KCPSNEIFSRCDGRCQRFCPNVVPKPLC-----IKICAPGCVCRLGYLRNKKKVCVPR 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
               N-LINKED (GLCNAC...) (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                               0E44DB77DF2A2620 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZAN_HUMAN STANDARD; PRT; 2700 AA. 09Y493; 000218; 16-OCT-2001 (Rel. 40, Last sequence update) 16-OCT-2001 (Rel. 40, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Testis;
MEDLINE=97271566; PubMed=9126492;
   2111 N-LIR
2142 N-LIR
22532 N-LIR
22575 N-LIR
2862 N-LIR
3052 N-LIR
3105 N-LIR
3105 N-LIR
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3188 N-LIR
4136 N-LIR
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Best Local Similarity 37.5%;
Matches 24; Conservative E
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R Pfam; PF0004; vwd; 4.

R Pfam; PF00245; rulu; 25.

R Pfam; PF01245; rulu; 25.

R SMART; SM0018; EGF; 2.

R SMART; SM0017; MAM; 2.

R SMART; SM00114; VWC; 17.

R SMART; SM00125; VWC; 17.

R SMART; SM00126; VWD; 4.

R SMART; SM00126; VWD; 4.

R PROSITE; PS01040; MAM 1: 1.

R PROSITE; PS00606; MAM 1: 74.

R PROSITE; PS00606; MAM 1: 74.

R PROSITE; PS0060; MAM 1: 74.

R P
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80 x HEPTAPEPTIDE REPEATS (APPROXIMATE)
(MUCIN-LIKE DOMAIN).
WWFD I (PARTIAL).
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EXTRACELLULAR (POTENTIAL).
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BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
N-LINKED (GLCNAC.
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VWED 8 (PARTIAL).
VWED 10 (PARTIAL).
VWED 10 (PARTIAL).
VWED 11 (PARTIAL).
VWED 12 (PARTIAL).
VWED 13 (PARTIAL).
VWED 14 (PARTIAL).
VWED 15 (PARTIAL).
VWED 16 (PARTIAL).
VWED 17 (PARTIAL).
VWED 19 (PARTIAL).
VWED 20 (PARTIAL).
VWED 21 (PARTIAL).
VWED 21 (PARTIAL).
VWED 22 (PARTIAL).
VWED 23 (PARTIAL).
VWED 23 (PARTIAL).
VWED 23 (PARTIAL).
VWED 24 (PARTIAL).
VWED 23 (PARTIAL).
VWED 25 (PARTIAL).
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VWFD 5 (PARTIAL).

VWFD 6 (PARTIAL).
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N-LINKED
N-LINKED
                                                                                     InterPro; IPR000998; MAM_domain.
InterPro; IPR002919; TIL_Cysrich.
InterPro; IPR001328; TILa_Cysrich.
InterPro; IPR001007; VWF_C.
EMBL; U97068; AAC26680.1; -. EMBL; U83190; AAC53125.1; -. MGD; MGI:106656; Zan. InterPro; IPR003645; EGF-like. InterPro; IPR003645; FOLN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66 X HEPTAPEPTIDE REPEATS (APPROXIMATE) (MUCIN-LIKE DOMAIN).
                                               -!- DOMAIN: DURING SPERM MIGRATION THROUGH THE REPRODUCTIVE TRACTS, THE MUCIN-LIKE DOMAIN MIGHT INHIBIT INAPPROPRIATE TRAPPING OF SPERMATOZOA OR PROMOTING ABHESTON TO THE OVIDUCTAL ISTHMUS.
-!- DOMAIN: THE WYED DOMAINS 2 AND 3 MAY MEDIATE COVALENT OLIGOMERIZATION (BY SIMILARITY TO HUMAN INTESTINAL MUCIN MUC2).
-!- SIMILARITY: CONTAINS 3.5 MAM DOMAINS.
APICAL REGION OF THE SPERM HEAD (BY SIMILARITY).
TISSUE SPECIFICITY: IN TESTIS; PRIMARILY IN HAPLOID SPERMATIDS.
DOMAIN: THE MAM DOMAINS PROBABLY MEDIATE SPERM ADHESION TO THE
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MAM 3.
MAM 4.
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InterPro: IPR000998; MAM_domain.
InterPro: IPR00319; TIL_Cysrich.
InterPro: IPR00338; TILa_Cysrich.
InterPro: IPR001846; VWF_D.
                                                                                                                                                                                                                                                       EMBL; AF053356; AAC78790.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF02345; TILa; 4.
SMART; SM0216; VWD; 1.
PROSITE; PS01186; EGF 2; 3.
PROSITE; PS00740; MAM_1; 1.
PROSITE; PS50060; MAM_2; 4.
Glycoprotein; Transmembrane; C.
                                                                                                                                                                                                                                                                 EMBL; U83191; AAC51208.1; -.
Genew; HGNC:12857; ZAN.
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Pfam; PF00629; MAM; 4.
Pfam; PF01826; TIL; 5.
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1618 105
1832 187
1878 187
2136 21.
2374 237
2700 AA;
                                     ZONA PELLUCIDA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the egg extracellular matrix is homologous to von Willebrand factor.";
J. Biol. Chem. 270:26025-26028(1995).
-!- FUNCTION: BINDS IN A SPECIES-SPECIFIC MANNER TO THE ZONA PELLUCIDA OF THE EGG. MAY BE INVOLVED IN GAMETE RECOGNITION AND/OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- SUBGUIT: PROBABLY FORMS COVALENT OLIGOMERS.
-!- SUBCELLULAR LOCATION: TYPE I MEMBRANE PROTEIN, EXCLUSIVELY ON THE APICAL REGION OF THE SPERM HEAD (BY SIMILARITY).
-!- TISSUE SPECIFICITY: IN TESTIS, PRIMARILY IN HAPLOID SPERMATIDS.
NOT IN LUNG, LIVER, HEART, SPLEEN, BRAIN, KIDNEY, EPDDLOYMIS.
-!- DOMAIN: THE MAM DOMAINS PROBABLY MEDIATE SPERM ADHESION TO THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hardy D.M., Garbers D.L.; ^{\rm A} A sperm membrane protein that binds in a species-specific manner to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN: DURING SPERM MIGRATION THROUGH THE REPRODUCTIVE TRACTS, THE MUCIN-LIKE DOMAIN MIGHT INHIBIT INAPPROPRIATE TRAPPING OF SPERMATOZOA OR PROMOTING ADHESION TO THE OVIDICTAL ISTHMUS. DOMAIN: THE VWFD DOMAINS 2 AND 3 MAY MEDIATE COVALENT OLIGOMERIZATION (BY SIMILARITY TO HUMAN INTESTIBAL MUCIN MIC2). PTM: THE MAM DOMAINS AND THE MUCIN-LIKE DOMAINS ARE MISSING FROM THE ZONADHESIN THAT BINDS TO THE EGG EXTRACELLULAR MATRIX.
                                                                                                                                                                                                                                                                    Eukaryota; Metázoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBL_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                SECUENCE FROM N.A., AND SEQUENCE OF 823-830; 859-872; 883-890; 920-925; 90-95; 9177-71235-1244; 1349-1354; 1518-1532; 1624-1656; 1658-1667; 1777-7195 AND 1914-1921.
STRAIN-Meishan; TISSUE-Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROCESSING MIGHT OCCUR DURING SPERM MATURATION AND/OR
                                                                                                                                          01-NoV-1997 (Rel. 35, Created)
01-NoV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SIMILARITY: CONTAINS 2 MAM DOMAINS.
-!- SIMILARITY: CONTAINS 4.5 VWFD DOMAINS.
-!- SIMILARITY: CONTAINS 1 EGF-LIKE DOMAIN.
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InterPro; IPR00328; TILa_Cysrich.
InterPro; IPR001007; VWE_C.
InterPro; IPR001846; VWE_D.
                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-96064658; PubMed-7592795;
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InterPro; IPR000998; MAM_domain.
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                                                                                                        STANDARD;
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Pfam; PF00629; MAM; 2.
Pfam; PF01826; TIL; 5.
                                                                                                                                                                                                          Zonadhesin precursor
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2224 CVPRSQCG 2231
                                                                                                                                                                                                                                              Sus scrofa (Pig).
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                                                                                                      ZAN_PIG
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13; Indels 20; Gaps

11 KCPSNEIFSRC------DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59

11; Mismatches

24; Conservative

Matches

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Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Hexapoda;

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                              PROSITE; PS00022; EGF_1; 1.
PROSITE; PS01186; EGF_2; 4.
PROSITE; PS00740; MAM_1; 1.
Signal; Glycoprotein; Transmembrane; EGF-like domain; Cell adhesion;
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-> Y (IN REF. 1; AA SEQUENCE).
-> Y (IN REF. 1; AA SEQUENCE).
-> K (IN REF. 1; AA SEQUENCE).
                                                                                                                            EXTRACELLULAR (POTENTIAL).
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N-LINKED (GLCNAC.)

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(GLCNAC.
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                                                                                                                                                                                                                                                                                                          (GLCNAC.
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15-JUL-1999 (Rel. 38, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Apis mellifera (Honeybee).
                                                                                                                                                                                                                                                                       BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
N-LINKED (GLCNAN-LINKED (GLCNAN-LINKED)
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SMART; SM00137; MAM; 1.
SMART; SM00214; VWC; 2.
SMART; SM00216; VWD; 4.
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PLSQCG 1512
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P56682;
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TRANSMEM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PARTICIPATES IN PLATELET-VESSEL WALL INTERACTIONS BY FORMING A NONCOVALENT COMPLEX WITH COAGULATION FACTOR VIII AT THE SITE OF
              Neoptera; Endopterygota; Hymenoptera; Apocrita;
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-- FUNCTION: IMPORTANT IN THE MAINTENANCE OF HOMEOSTASIS, IT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shibuya H., Nonneman D.J., Holzhauer J., Mohammed I.H.,
                                                                                                                                      Bania J., Stachowiak D., Polanowski A.;
"Primary structure and properties of the cathepsin G/chymotrypsin inhibitor from the larval hemolymph of Apis mellifera.";
Eur. J. Blochem. 262:680-687(1999).
-!- FUNCTION: CHYMOTRYESIN AND CATHEPSIN G INHIBITOR.
-!- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Carnivora; Fissipedia; Canidae; Canis.
NCBL_TaxID=9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11 KCPSNEIFSRCDGRCQRFCPNVVPKP-LCIKICAPGCVCRLGYLRNKKVCVPRSKC
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 104.5; DB 1; Length 56; Pred. No. 7.6e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Montgomery R.R., Fahs S., Montgomery M.W.;
Submitted (AUG-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.
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Johnson G.S.;
Submitted (AUG-1996) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                           5973 MW; 092B2815AE6B2B7F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VWF_CANFA STANDARD, PRT; 2813 AA. 028205; 028311; 09TS14; 01-NOV-1997 (Rel. 35, Created) CCT-2001 (Rel. 40, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) Von Willebrand factor precursor (VWF).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7; Mismatches
                                                                                                                                                                                                                                                                                                      Serine protease inhibitor; 3D-structure.
                                                                                                      TISSUE-Hemolymph;
MEDLINE-99339935; PubMed=10411628;
                                                                                                                                                                                                                                                PDB; 1CCV; 12-MAR-99.
InterPro; IPR002919; TIL_Cysrich.
Pfam; PF01826; TIL; 1.
                Insecta, Pterygota, Neoptera, Enc
Aculeata, Apoidea, Apidae, Apis.
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                                                                                     SEQUENCE, AND STRUCTURE BY NMR.
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VASCULAR INJURY (BY SIMILARITY).

-! SUBUNIT: MULTIMERIC (BY SIMILARITY).

-! TISSUE SPECIFICITY: BLOOD.

-! PTM: ALL CYSTEINE RESIDUES ARE INVOLVED IN INTRACHAIN OR INTERCHAIN DISULFIDE BONDS (BY SIMILARITY).

-! SIMILARITY: CONTAINS 3 WWFA DOMAINS.

-! SIMILARITY: CONTAINS 4 WWFD DOMAINS.

-! SIMILARITY: CONTAINS 4 WWFD DOMAINS.

-! SIMILARITY: CONTAINS 1 CTERMINAL CYSTINE KNOT-LIKE (CTCK) DOMAIN.

-! SIMILARITY: SOME, TO SILKWORM HEMOCYTIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Glycoprotein; Extracellular matrix; Cell adhesion; Signal.
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VON WILLEBRAND FACTOR.
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EMBL; L16903; AAA30903.1; --
EMBL; AR099154; AAD04319.1; --
EMBL; BC6246; AAB093766.1; --
HSSP; P04275; IAUQ.
InterPro; IPR000359; Cys_knot.
InterPro; IPR002919; TIL_CYSrich.
InterPro; IPR002919; TIL_CYSrich.
InterPro; IPR002919; TWF_C.
InterPro; IPR001007; VWF_C.
InterPro; IPR001007; VWF_D.
Pfam; PP000092; VWS_3.
Pfam; PP00092; VWS; 3.
Pfam; PP00094; VWG; 3.
Pfam; PP010826; TIL, 4.
PRINTS; PR00453; VWRADOMAIN.
SWART; SM00211; VWR, 3.
SWART; SM00214; VWC; 5.
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PROSITE; PS01225; CTCK_2; 1.
PROSITE; PS01224; WWFA; 3.
PROSITE; PS01208; WWFC; 3.
Blood cogulation; Platelet; Gl
Plasma; Hemostasis; Repeat; Cel
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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BY SIMILARITY
BY
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                                                                                                                                                                               Janel N., Ribba A.S., Cherel G., Kerbiriou-Nabias D., Meyer D., "Primary structure of the propeptide and factor VIII-binding domain of bovine von Willebrand factor.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Comparison of the 5'-flanking sequences of the human and bovine von Willebrand factor-encoding genes reveals alternation of highly homologous domains with species-specific Alu-type repeats."; Gene 167:291-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fujisawa T., Takagi J., Sekiya F., Goto A., Miake F., Saito Y.; "Monoclonal antibodies that inhibit binding of propolypeptide of von Wallebrand factor to collagen. Localization of epitopes."; Eur. J. Blochem. 196:673-677(1991).
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Takagi J., Aoyama T., Ueki S., Ohba H., Saito Y., Lorand L.;
Tidentification of factor-XIIIa-reactive glutaminyl residues in the
propolypeptide of bovince von Willebrand factor.".

Eur. J. Biochem. 232:773-77(1995).

-!- FUNCTION: IMPORTANT IN THE MAINTENANCE OF HOMEOSTASIS, IT
PARTICIPATES IN PLAYELET-VESSEL MALL INTERACTIONS BY FORMING A
NONCOVALENT COMPLEX WITH COAGULATION FACTOR VIII AT THE SITE OF
Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
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                                                                                                                                                                                                                                                                                                                                                                                                          Janel N., Schwachtgen J.L., Bakhshi M.R., Barek L., Meyer D.,
Kerbiriou-Nabias D.;
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-!- PTH: ALL CYSTEINE RESIDUES ARE INVOLVED IN INTRACHAIN OR INTERCHAIN SULFIDE BONDS (BY SIMILARITY).
-!- SIMILARITY: CONTAINS AT LEAST 3 WWFD DOMAINS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL
                                                                                                                                                                                                                                                                                   Biochim. Biophys. Acta 1339:4-8(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS01185; CTCK_1; PARTIAL. PROSITE; PS01225; CTCK_2; PARTIAL. PROSITE; PS01208; VWFC; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VWFD
                                                                                                                       SEQUENCE FROM N.A. MEDLINE-97307751; PubMed-9165093;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PARTIAL SEQUENCE.
MEDLINE-91192039; PubMed-1707363;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000359; Cys_knot.
InterPro; IPR002919; TIL_Cysrich.
InterPro; IPR001007; VWF_C.
InterPro; IPR001846; VWF_D.
                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 1-177 FROM N.A. MEDLINE=96144290; Pubmed=8566794;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PARTIAL SEQUENCE.
MEDLINE=96028118; PubMed=7588715;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; Y09353; CAA70525.1; -. EMBL; U28147; AAA96953.1; -.
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Pfam; PF01826; TIL; 2.
SMART; SM00214; VWC; 1.
SMART; SM00216; VWD; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 762 >937
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540
786
832
852
                                 Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VASCULAR INJURY.
Mammalia; Eutheria;
                                                        NCBI_TaxID=9913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Biol. Reprod. 65:1691-1700(2001).
-!- FUNCTION: BINDS IN A SPECIES-SPECIFIC MANNER TO THE ZONA PELLUCIDA OF THE EGG. MAY BE INVOLVED IN GAMETE RECOGNITION AND/OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNALING (BY SIMILARITY).
SUBUNIT: PROBABLY FORMS COVALENT OLIGOMERS (BY SIMILARITY).
SUBCELLULAR LOCATION: TYPE I MEMBRANE PROTEIN, EXCLUSIVELY ON THE
APICAL REGION OF THE SPERM HEAD (BY SIMILARITY).
DOMAIN: THE MAM DOMAINS PROBABLY MEDIATE SPERM ADHESION TO THE
                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN: DUERING SPERM MIGRATION THROUGH THE REPRODUCTIVE TRACTS, DOMAIN: DUERING SPERM MIGHT INHIBIT INAPPROPRIATE TRAPPING OF SPERMATOZOA OF PROMOTING ADDESION TO THE OVIDUCTAL ISTHMUS. DOMAIN: THE VWFD DOMAINS 2 AND 3 MAY MEDIATE COVALENT OLIGOMERIZATION (BY SIMILARITY TO HUMAN INTESTINAL MUCIN MUC2). SIMILARITY: CONTAINS 4.5 WAM DOMAINS. SIMILARITY: CONTAINS 4.5 VWFD DOMAINS. SIMILARITY: CONTAINS 1 EGF-LIKE DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                651 CPHGQVYQQCGTPCNLTCRSLSHPDEECTEVCLEGCFCPPGLFLDETGSCVPKAQC 706
                                                                                                                     (POTENTIAL).
                                                                                                                                   (POTENTIAL).
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                                                                                                   . .) (POTENTIAL)
                                                                                                                                                                (POTENTIAL)
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"Zonadhesin: characterization, localization, and zona pellucida
                                                                                                                                               (POTENTIAL)
                                                                                                                                                                                                                                                                      Score 101.5; DB 1; Length 937; Pred. No. 0.0014;
                                                                                                                                                                                                                                                                                                                                   12 CPSNEIFSRCDGRCQRFCPNVV-PKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKC
                                                                                                                                                                                                                                                                                                    26; Indels
                                                                                                                                                                                                                                          MW; 9BF4C94A254A5629 CRC64;
                                                     BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
N-LINKED (GLCNAC...) (
MISSING (IN REF. 4).
                         FACTOR XIIIA-BINDING. FACTOR XIIIA-BINDING.
                                                                                                                                                                                                             -> Q (IN REF 4)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Rel. 41, Last sequence update) (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT; 2282 AA.
                                                                                                                                                                                                                                                                                                      13; Mismatches
                                                                                                                                                                                                                                                                                       Pred. No.
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MEDLINE=21573741; PubMed=11717130;
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                                                                                                                                                                                                                                                                         26.0%;
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                                                                                                                                                                                                                                            102599
                                                                                                                                                                                                                                                                                                         16; Conservative
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                                                                                                                                                                                                                                          937 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JUN-2002
15-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                           ZAN_RABIT
P57999;
                                                                                                                                                                                               CONFLICT
                                                                                                                                                                                                                                            SEQUENCE
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                                                                         DISULFID
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                                                                                                        CARBOHYD
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                                                                                                                                                                                  CONFLICT
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                            SITE
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EMBL; AF244982; AAF63342.2; -.

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26 X HEPTAPEPTIDE REPEATS (APPROXIMATE) (MUCTU-LIKE DOMAIN). VWFD 1 (PARTIAL). VWFD 2. VWFD 3. VWFD 4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 KCPSNEIFSRCDGRCQRFCPNV-VPKPLCIKI-CAPGCVCRLGYLRNKKKVCVPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (POTENTIAL).
(POTENTIAL).
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(POTENTIAL).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS00740; MAM_1; FALSE_NEG.
PROSITE; PS50060; MAM_2; 2.
Glycoprotein; Transmembrane; EGF-like domain; Cell adhesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 2282;
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16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
ACP62F OR CG1262.
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BY SIMILARITY.
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N-L
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                                              InterPro; IPR000561; EGF-like.
InterPro; IPR000054; MAM domain.
InterPro; IPR002919; TIL_Cysrich.
InterPro; IPR002919; TIL_Cysrich.
InterPro; IPR003198; TILA_Cysrich.
InterPro; IPR003107; VWF.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAM 2
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                                                                                                                                                                                                                              Pfam; PF00094; vwd; 8.
Pfam; PF00629; MAM; 4.
Pfam; PF01826; TIL; 10.
SMART; SM00001; EGF_like; 1.
SMART; SM00137; MAM; 2.
SMART; SM00214; VWC; 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37.3%;
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PROSITE; PS01186; EGF_2; 4.
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                           P56682; 1CCV
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O46202;
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DOMAIN
TRANSMEM
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A62F_DROME
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DOR WENT THE FET THE F
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RX STATN=BERCHEAY;

RXATN=BERCHEAY;

RXA MEDLINE=20196006; PubMed=10731132;

RADINE=20196006; PubMed=1073132;

RADINE=20196006; PubMed=10732;

RADINE=20196006; PubMed=107332;

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-!- FUNCTION: RESPONSIBLE FOR PHYSIOLOGICAL AND BEHAVIORAL CHANGES IN MATED FEMALE FLIES. MAY CONTRIBUTE TO THE TOXICITY OF SEMINAL FLUID AND THE DECREASED LIFE-SPAN OF MATED FEMALES. MAY ALSO AFFECT NEUROMUSCULAR EVENTS AFTER MATING CONCERNING SPERM STORAGE
Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Hexapoda;
Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera;
Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=20556153; PubMed=11102381; Begun D.J., Whitley P., Todd B.L., Waldrip-Dail H.M., Clark A.G.; "Molecular population genetics of male accessory gland proteins in
                                                                                                                                       SEQUENCE FROM N.A., FUNCTION, AND TISSUE SPECIFICITY.
STRAIN-Carton-S; TISSUE-MALA accessory gland;
MEDLINE-98135120; Pubmed-9474779;
Wolfner M.F., Harada H.A., Bertram M.J., Stelick T.J., Kraus K.W.,
Kalb J.W., Lung Y.O., Neubaum D.M., Park M., Tram U.K.;
mey genes for male accessory gland proteins in Drosophila
melanogaster.*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AND EGG RELEASE. SUBCELLULAR LOCATION: Secreted (Probable).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!- TISSUE SPECIFICITY: SEMINAL FLUID.
-!- SIMILARITY: SOME, TO P.NIGRIVENTER TX2-6.
                                                                                                                                                                                                                                                                                                            Insect Biochem. Mol. Biol. 27:825-834(1997).
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL. ACCESSORY GLAND PROTEIN ACP62F.
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Mancuso D.J., Tuley E.A., Westfield L.A., Worrall N.K.,
Shelton-Inloes B.B., Sorace J.M., Alevy Y.G., Sadler J.E.;
"Structure of the gene for human von Willebrand factor.";
J. Biol. Chem. 264:19514-19527(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25.1%; Score 98; DB 1; Length 115
34.4%; Pred. No. 0.00065;
Live 9; Mismatches 31; Indels
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TISSUE-Umbilical vein endothelial cells;
MEDLINE-87213253; PubMed=3495266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last sequence update)
Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                        InterPro, IPR002919; TIL_Cysrich. Pfam; PF01826; TIL; 1. Behavlor; Signal.
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MEDLINE~87016349; Pubmed=3489923;
                                                                                                                                                           EMBL; AE003475; AAF47683.1;
EMBL; AY010608; AAG35367.1;
EMBL; AX010609; AAG35368.1;
                                                                                                                                                                                                                                                                                                                        EMBL; AY010616; AAG35375.1; -. EMBL; AY010617; AAG35376.1; -.
                                                                                                                                                                                                                EMBL, AY010610; AAG35369.1; -. EMBL, AY010611; AAG35370.1; -. EMBL, AY010612; AAG35371.1; -. EMBL, AY010613; AAG35372.1; -. EMBL, AY010614; AAG35373.1; -.
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01-JUL-1993 (Rel. 26, Last seq
                                                                                                                                                                                                                                                                                                         AY010615; AAG35374.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                115 AA; 12570 MW;
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SEQUENCE OF 990-1947 FROM N.A.
MEDLINE=91105089; PubMed=1988024;
Mancuso D.J., Tuley E.A., Westfield L.A., Lester-Mancuso T.L.,
Le Beau M.M., Sorace J.M., Sadler J.E.;
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EMBO J. 5:1839-1847(1986).
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MEDLINE-8811704; PubMed=2828057;
Bonthron D., Orkin S.H.;
"The human von Willebrand factor gene. Structure of the 5' region.";
Evolution of human von Willebrand factor: cDNA sequence polymorphisms, repeated domains, and relationship to von Willebrand antigen II.";
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Titani K., Kumar S., Takio K., Ericsson L.H., Wade R.D., Ashida K.,
Ashalsh K.A., Chopek M.W., Sadler J.E., Fujikawa K.;
"Amino acid sequence of human von Willebrand factor.";
Biochemistry 25:3171-3184(1986).
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MEDLINE-85244588; PubMed-3874428;
Ginsburg D., Handin R.I., Bonthron D.T., Donlon T.A., Bruns G.A.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 2731-2813 FROM N.A.
MEDLINE-85269603; PubMed-3875078;
Weweij C.L., de Vries C.J.M., Distel B., van Zonneveld A.-J.,
Geurts van Kessel A., van Mourik J.A., Pannekoek H.;
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MEDLINE-85201687; PubMed=3873280;
Lynch D.C., Zimmerman T.S., Collins C.J., Brown M., Morin M.J.,
Ling E.H., Livingston D.M.;
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EMBO J. 5:3074-3074(1986).
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Proc. Natl. Acad. Sci. U.S.A. 82:6394-6398(1985).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 781-1424 FROM N.A. MEDLINE=86269894; PubMed=3488076;
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                                                                                                      SEQUENCE OF 1-1400 FROM N.A.
MEDLINE=87004550; Pubmed=3019665;
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695 MDERGDCVPKAQC 707
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                                         disease.
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"The von Willebrand factor A3 domain does not contain a metal ion-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ignnuzzi M.C., Hidaka N., Boehnke M., Bruck M.E., Hanna W.T., Collins F.S., Ginsburg D.;
"Analysis of the relationship of von Willebrand disease (vWD) and hereditary hemorrhagic telangiectasia and identification of a potential type ITA vWD mutation (IIe865 to Thr).";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              implications for the binding of platelet glycoprotein Ib."; J. Biol. Chem. 273:10396-10401(1998).
"Molecular cloning of cDNA for human von Willebrand factor:
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MEDLINE-87260814; PubMed-3496594;
Collins C.J., Underdahl J.P., Levene R.B., Ravera C.P.,
Morin M.J., Dombalagian M.J., Ricca G., Livingston D.M.,
Lynch D.C.;
                                                                                Submitted (JUL-1991) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X-RAY CRYSTALLOGRAPHY (1.8 ANGSTROMS) OF 1685-1873.
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MEDLINE=98221174; PubMed=9553097;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       K-RAY CRYSTALLOGRAPHY (2.2 ANGSTROMS) OF 1686-1872.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            dependent adhesion site motif.";
J. Biol. Chem. 272:25162-25167(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                              Willebrand factor.";
Eur. J. Biochem. 158:295-298(1986).
                                                                                                                                                                                                                                                MEDLINE=88163465; PubMed=3502076;
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            a new method."
                                                                                                                                                                                                                                                                                                   Biochemistry 26:8099-8109(1987).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Structure 5:1147-1156(1997).
                                                                                                                                                                                                                                                                                                                               STRUCTURE OF CARBOHYDRATES.
           authentication by a Cell 41:49-56(1985)
                                                                                                                                                                                                                                                                                        Willebrand factor
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                                                      REVISIONS
                                                                     Lynch D.C
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SEQUENCE OF 397-553 FROM N.A. MEDLINE=93356762; PubMed=8352759; Lavergne J.M., Piao Y.C., Ferreira V., Kerbiriou-Nabias Q., Bahnak B.R., Mayer D.; Perreira Y., Kerbiriou domain of human, porcine "Primary structure of the factor VIII binding domain of human, porcine and rabbit von Willebrand factor.";
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-! SUBUNIT: MUSTIMERIC (BY SIMILARITY).

-! PTM: ALL CYSTEINE RESIDES ARE INVOLVED IN INTRACHAIN OR INTERCHAIN DISULFIDE BONDS (BY SIMILARITY).

-! SIMILARITY: CONTAINS 3 VWFC DOMAINS.

-! SIMILARITY: CONTAINS 1 C-TERMINAL CYSTINE KNOT-LIKE (CTCK) DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDILINE=91185601; PubMed=2010538; Randi A.M., Rabinowitz I., Mancuso D.J., Mannucci P.M., Sadler J.E.; "Molecular basis of von Willebrand disease type IIB. Candidate mutations cluster in one disulfide loop between proposed platelet Jlycoprotein Ib binding sequences."; J. Clin. Invest. 87:1220-1226(1991).
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Gaucher C., Mercier B., Jorieux S., Oufkir D., Mazurier C.; "Identification of two point mutations in the von Willebrand factor gene of three families with the 'Normandy' variant of von Willebrand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 GRG-------KCPSNEIFSRCDGRCQRFCPNV-VPKPLCIKICAPGCVCRLGYL 53
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Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
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-!- FUNCTION: IMPORTANT IN THE MAINTENANCE OF HOMBOSTASIS, IT PARTICIPATES IN PLATELET-VESSEL WALL INTERACTIONS BY FORMING NONCOVALENT COMPLEX WITH COAGULATION FACTOR VIII AT THE SITE
                                                                                                                                                                                                                                                                                                                                                         "An Arg545-->Cys545 substitution mutation of the von Willebrand factor in type IIB von Willebrand's disease.";

Eur. J. Haematol. 47:342-345(1991).
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                                                                                                                                                                                                                                                                                           Donner M., Andersson A.-M., Kristoffersson A.-C., Nilsson I.M., Dahlback B., Holmberg L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VARIANTS TRP-1306; CYS-1308; MET-1316; GLN-1341 AND HIS-1399 MEDLINE-91185602; PubMed-1672694;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25.1%; Score 9%; DB 1; Length 2813; 26.0%; Pred. No. 0.0079; ive 13; Mismatches 27; Indels
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15-JUN-2002 (Rel. 41, Last annotation update)
Von Willebrand factor precursor (VWF) (Fragment).
FRVWF OR VWF.
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                                                                                                                                               Br. J. Haematol. 78:506-514(1991).
                                                                                                                                                                                                                     VARIANT CYS-1308.
MEDLINE=92104315; PubMed=1761120;
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16-OCT-2001 (Rel. 40, Last sequ
15-JUN-2002 (Rel. 41, Last anno
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              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the Buropaen Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                      PROSITE; PSG0234; WPRC; 3.
PROSITE; PSG01284; WPRC; 3.
PROSITE; PSG01285; CTCK_1; 1.
PROSITE; PSG01255; CTCK_2; 1.
Blood coagulation; Platelet; Glycoprotein; Extracellular matrix; Plasma; Hemostasis; Repeat; Cell adhesion.
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CELL ATTACHMENT
-!- SIMILARITY: SOME, TO SILKWORM HEMOCYTIN.
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InterPro; IPR000361; EGF-like.
InterPro; IPR000561; EGF-like.
InterPro; IPR000864; Potato_inhibit.
InterPro; IPR002019; TiL_Cysrich.
InterPro; IPR002019; VWF_A.
InterPro; IPR001007; VWF_C.
InterPro; IPR001007; VWF_C.
InterPro; IPR00097; Cys_knot; I.
Pfam; PF000097; Cys_knot; I.
Pfam; PF000091; VWA; 3.
Pfam; PF000094; VWA; 3.
Pfam; PF000094; VWA; 3.
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VWFA 1.
VWFA 2.
VWFA 3.
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VWFC 1.
VWFC 2.
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EMBL; S64541; AAB27829.2; -.
HSSP; P04275; 1ATZ.
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PRINTS; PR00292; POTATOINHBTR.
PRINTS; PR00453; VWFADOMAIN.
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SMART; SM01181; EGF; 1.
SMART; SM00127; VWA, 3.
SMART; SM001214; VWC; 5.
SMART; SM00216; VWD; 3.
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Insecta; Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata;
Ditrysia; Bombycoidea; Bombycidae; Bombyx.
NCBI_TaxID=7091;
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KOLDAI E., Iwamoto S.I., Tashiro M., Mori H., Sumida M.,
Matsubara F., Yamakawa M.;
Matsubara F., Yamakawa M.;
Submitted (JAN.1993) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: ADHESIVE PROTEIN AND RELATES TO HEMOSTASIS OR
ENCAPSULATION OF FOREIGN SUBSTANCES FOR SELF-DEFENSE.
-!- DEVELOPMENTAL STAGE: EXPRESSED IN HEMOCYTES DURING LARVAL-PUPAL
METAMORPHOSIS.
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; Pred. No. 0.035;
11; Mismatches 31; Indels 5;
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01-FEB-1996 (Rel. 33, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
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STRAIN-FUYOU X TOKai; TISSUE-Hemocyte;
MEDLINE-95178544; PubMed-7873598;
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1640 1640 N-LII
1959 1959 N-LII
2026 2026 N-LII
2215 2215 N-LII
2251 2215 N-LII
2459 2459 N-LII
2482 AA; 272394 MW; L
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                                                                                    -:- SIMILARITY: CONTAINS 2 F5/8 TYPE C DOMAINS.
-:- SIMILARITY: CONTAINS 2 VWFC DOMAINS.
-:- SIMILARITY: CONTAINS 1 C-TERMINAL CYSTINE KNOT-LIKE (CTCK) DOMAIN.
                                                   -:- SIMILARITY: TO MAMMALIAN VON WILLEBRAND FACTOR.
-:- SIMILARITY: THE N-TERMINAL DOMAIN SHOWS SOME SIMILARITY TO THAT OF HUMAN MUCIN 2.
INDUCTION: HEMAGGLUTINATION ACTIVITY IS INCREASED BY BACTERIAL OR VIRAL INFECTION AND INHIBITED BY D-MANNOSE, N-ACETYL-D-GALACTOSAMINE AND D-MALTOSE.

PTM: MAY BE CONVERTED INTO THE 260 KDa MATURE HEMOCYTIN BY PROTEOLYSIS.
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InterPro; IPR000421; FA58 C.
InterPro; IPR0000431; FA58 C.
InterPro; IPR000083; Fibrncth1.
InterPro; IPR00172; LDL_recept_A.
InterPro; IPR001907; WHE_C.
InterPro; IPR001804; WHE_D.
InterPro; IPR001878; Znf_CCHC.
Pfam; PF00754; FS_F8_type_C; Pfam; PF00754; FS_F8_type_C; 2.
                                                                                                                                                                                                                                                                                                                                                                         SMART; SM00041; CT; 1.
SMART; SM00041; CT; 1.
SMART; SM00058; FN1; 1.
SMART; SM00058; FN1; 1.
SMART; SM00192; LDLa; 1.
SMART; SM00194; VWC; 3.
SMART; SM00214; VWC; 3.
SMART; SM00316; VWD; 3.
SMART; SM00316; VWD; 3.
SMART; SM00349; CTCK_L; 1.
PROSITE; PS011285; CTCK_L; 1.
PROSITE; PS011285; CTCK_L; 2.
PROSITE; PS011285; FA58C_L; 2.
PROSITE; PS01286; FA58C_L; 2.
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TISSUE—Salivary gland;

MEDLINE=9017404; PubMed=1689777;

MEDLINE=9017404; PubMed=1689777;

MEDLINE=9017404; PubMed=1689777;

MEDLINE=9017404; PubMed=1689777;

"The Balbiani ring 3 gene in Chironomus tentans has a diverged repetitive structure split by many introns.";

J. Mol. Biol. 211:331-349(1990).

J. Mol. Biol. 211:331-349(1990).

STRUCTUNE, THE LARVAL TUBE. BALBIANI RING PROTEIN 3 COULD PLAY A ROLE AS A TRANSPORT PROTEIN THAT BINDS TO OTHER PROTEINS

INTRACELLULARLY AND IN THE GLAND LUMEN IN ORDER TO PREVENT THESE FROM FORMING WATER-INSOLUBLE FIBERS TOO BARLY.
                                                                                                                                                                                                                                                                                                                                                                                    23.1%; Score 90.5; DB 1; Length 3133; 27.5%; Pred. No. 0.053; Live 11; Mismatches 26; Indels 13; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Hexapoda;
Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Nematocera;
Chironomoidea; Chironomidae; Chironominae; Chironomus.
                                                                                                                                                                                                                                                                                                                                                                                                                                   11 KCPSNEIFSRCDGRCQRFCPN----VVPKPLCI-KICAPGCV-----CRLGYLRNKK 57
                                                                                                               (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                                                                                             (POTENTIAL).
(POTENTIAL).
                                                                                                                                                                                                                                    (POTENTIAL).
                                                                                                                                                                                                                                                                      (POTENTIAL).
                                                                                                                                                                                                                        (POTENTIAL)
                                                                                                                                                                                                                                               (POTENTIAL)
                                                                                                                                                                                                                                                          (POTENTIAL)
                                                                                                                                                                                                                                                                               (POTENTIAL).
                                                                                                                                                                                               (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                3133 AA; 343350 MW; E5210D5D14A7B2B2 CRC64;
                                                                           N-LINKED GECNAC.
                                                                                                                                                                                                                                                                     (GLCNAC.
           BY SIMILARITY.
BY SIMILARITY.
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01-0cT-1993 (Rel. 27, Last sequence update)
16-0cT-2001 (Rel. 40, Last annotation update)
Balbiani ring protein 3 precursor.
                                                                                                                                                                                                                                                                     N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chironomus tentans (Midge).
                                                                                                                                                                                                                                                                                                                                                                                                              19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                      2113
2161
2276
2451
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    829 RTCVPVKDC 837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58 KVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=7153;
                                                        _BAR3_CHITE
Q03376;
DISULFID
DISULFID
DISULFID
DISULFID
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CARBOHYD
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CARBOHYD
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                                                                                                                                                                                                                                                                                                                                           VARIANT
                                                                                                                                                                                                                                                                                                                                                       VARIANT
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                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1234 CPGNQIW--CDNTCRCVCPKNMEKPADNCKTKWWNDEMCQCVCKPGCPGGCK-GVMKWN 1290
                                                                                                                                                                                                                                                                                                                                                                                                                         26; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                        12 CPSNEIFSRCDGRCQRFCPNVVPKP------LCIKICAPGCV---CRLGYLRNK 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-AUG-1988 (Rel. 08, Created)
01-AUG-1988 (Rel. 08, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Chymotrypsin/elastase isoinhibitor 1 (C/E-1 inhibitor).
Ascaris suum (Pig roundworm) (Ascarls lumbricoides).
Eukaryota: Metazoa: Nematoda; Chromadorea; Ascaridida; Ascaridoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-95006335; PubMed-1922044; Huang K., Strynadka N.C., Bernard V.D., Peanasky R.J., James M.N.; The molecular structure of the complex of Ascariss chymotrypsin/elastase inhibitor with porcine elastase."; Structure 2:679-689(1994).

-i FUNCTION: DEFEND THE ORGANISM AGAINST THE HOST'S PROTEINASES.
-i - SIMILARITY: BELONGS TO THE ASCARIS TRYPSIN INHIBITOR FAMILY.
PIR; S07127; S07127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   X-RAY CRYSTALLOGRAPHY (2.4 ANGSTROMS) OF COMPLEX WITH ELASTASE.
                                                                                                                                                                                                                                                                                                                                                                                      Length 1700;
                  -!- TISSUE SPECIFICITY: SALIVARY GLAND.
-!- DOMAIN: HAS 82 APPROXIMATE REPEATS OF CYS-X-CYS.X-CYS.
                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 0.099;
9; Mismatches 21; Indels
                                                                                                                                                                                                                                                                                                                                                  1700 AA; 186145 MW; 34202B28521B0815 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Babin D.R., Peanasky R.J., Goos S.M.; "The isolnhibitors of chymotrypsin/elastase from Ascaris lumbricoides: the primary structure."; Arch. Biochem. Biophys. 232:143-161(1984).
                                                                                                                                                                                                                                                                                                                                     BALBIANI RING PROTEIN 3.
                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PDB; IEAI; 05-APR-99.
InterPro; IPR002919; TIL_Cysrich.
Pfam; PF01826; TIL; 1.
Serine protease inhibitor; 3D-structure.
                                                                                                                                                                                                                                                                                                                   POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                      Score 86;
SUBCELLULAR LOCATION: Secreted
                                                                                                                                                                                                        EMBL; X52263; CAA36506.1; -...
PIR; S08167; S08167.
HSSP; PIS536; LEXZ.
InterPro; IPR004153; CXCXC_repeat.
Pfam; PF03128; CXCXC; 71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-84255715; PubMed-6564898;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1291 ANTCSCECPADKAKPASCG 1309
                                                                                                                                                                                                                                                                                                                                                                                      22.0%;
                                                                                                                                                                                                                                                                                                                                                                                                       29.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67
                                                                                                                                                                                                                                                                                                                                                                                                     3est_Local Similarity 29.1
4atches 23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57 KKVC---VPRSK----CG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                 20
1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ascarididae; Ascaris.
NCBI_TaxID=6253;
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                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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                                                                                                                                                                                                                                                                                                                 SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-Bristol N2;
MEDLINE-94150718; PubMed-7906398;
Milson R., Anscough R., Anderson K., Baynes C., Berks M.,
Milson R., Anscough R., Connell M., Copsey T., Cooper J., Coulson A.,
Craxton M., Dear S., Du Z., Durbin R., Favello A., Fraser A.,
Fulton L., Gardner A., Green P., Hawkins T., Hiller L., Jier M.,
Johnston L., Jones M., Kershaw J., Kirsten J., Laisster N.,
Latrellle P., Lightning J., Lloyd C., Mortimore B., O'Callaghan M.,
Parsons J., Percy C., Rifken L., Roopera A., Saunders D., Shownkeen R.
Sins M., Smaldon N., Smith A., Smith M., Sonnhammer E., Staden R.,
Sulston J., Thierry-Mieg J., Thomas K., Vaudin M., Vaughan K.,
Waterston R., Watson A., Weinstock L., Milkinson-Sproat J.,
                                                                                      Gaps
                                                                                                                     8 GRGKCPSNEIFSRCDG---RC---QRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKVC 60
                                                                                                                                           Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPN---------VVPKPLCIKICA 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "2.2 Mb of contiguous nucleotide sequence from chromosome III of C.
                                Score 80.5; DB 1; -. hred. No. 0.029; Indels 13; ...ev
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels; 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20.6%; Score 80.5; DB 1; Length 99; 28.1%; Pred. No. 0.041;
                                                                                                                                                                                                                                                                                                                                             01-FEB-1994 (Rel. 28, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Hypothetical 10.6 kDa protein 2K353.2 in chromosome III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99 AA; 10561 MW; 862C659838E47E5F CRC64;
                5DC10DE75B375F16 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17;
                                    20.6%; Scor.
30.3%; Pred. No. v...
''.a 10; Mismatches
                                                                                                                                                                                                                                                                                                                99 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10; Mismatches
 32
6862 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; L15313; AAA28199.1; -.
                                                               Best Local Similarity 30.39
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZK353.2; CE00386.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Caenorhabditis elegans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nature 368:32-38(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hypothetical protein.
                  63 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=6239;
                                                                                                                                                                                        61 VPRSKC 66
                                                                                                                                                                                                                       55 IPASOC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wohldman P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44 PGCV 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89 AGCV 92
                                                                                                                                                                                                                                                                                                            YOJ2_CAEEL
ACT_SITE
SEQUENCE
                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biochém. Biophys. Res. Commun. 187:934-939(1992).

-!- FUNCTION: THIS RECEPTOR BINDS INSULIN-LIKE GROWTH FACTOR I (IGF I)
WITH A HIGH AFFINITY AND IGF II WITH A LOWER AFFINITY. IT HAS A
TYROSIME-PROTEIN KINASE ACTIVITY.

-!- CATALYTIC ACTIVITY: ATP + a protein tyrosine = ADP + protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tyrosine phosphate.
SUBUNIT: TETRAMER OF 2 ALPHA AND 2 BETA CHAINS LINKED BY DISULFIDE BONDS. THE ALPHA CHAINS CONTRIBUTE TO THE FORMATION OF THE LICAND-BINDING DOMAIN, WHILE THE BETA CHAIN CARRIES THE KINASE DOMAIN. SUBCELLULAR LOCATION: Type I membrane protein.
SIMILARITY: BELONGS TO THE TYR FAMILY OF PROTEIN KINASES. INSULIN
                                                                                                                                                                                         Eukaryota; Métazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                       Du J., Delafontaine P.; "Inhibition of vascular smooth muscle cell growth through antisense transcription of a rat insulin-like growth factor I receptor CDNA."; Circ. Res. 76:963-972(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Developmental regulation of the rat insulin-like growth factor I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Werner H., Woloschak M., Adamo M., Shen-Orr Z., Roberts C.T. Jr.,
                                                                         01-MAR-1992 (Rel. 21, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Insulin-like growth factor I receptor precursor (EC 2.7.1.112).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 913-1017 FROM N.A.
MEDLINE-92412145; PubMed=1530648;
Kurachi H., Jobo K., Ohta M., Rawasaki T., Itoh N.;
"A new member of the insulin receptor family, insulin receptor-related receptor, is expressed preferentially in the Xidney.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- SIMILARITY: CONTAINS 2 FIBRONECTIN TYPE III-LIKE DOMAINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 86:7451-7455(1989)
                                      PRT; 1370 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR000494; EGFR_L_domain.
InterPro; IPR000719; Euk_Pkinase.
InterPro; IPR003961; FN_III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-Sprague-Dawley;
MEDLINE-90017496; PubMed-2477843;
                                                                                                                                                                                                                                                                                         TISSUE=Brain;
MEDLINE=95277910; PubMed=7758167;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR002011; RTKinaseII.
InterPro; IPR001245; Tyr_pkinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR002174; Furin-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00041; fn3; 2.
Pfam; PF00069; pkinase; 1.
Pfam; PF00757; Furin-like; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; L29232; AAA41392.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; M27293; AAA41384.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 1-364 FROM N.A.
                                      STANDARD;
                                                                                                                                                                         Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RECEPTOR SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PIR; A33837; A33837.
HSSP; P06213; 11RK.
                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor
RESULT 15
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N-LINKED (GLCNAC. . ) (POTENTIAL).
PHOSPHORYLATION (AUTO-) (BY SIMILARITY).
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                                                                                                SMART; SM00219; TYRC; 1.
PROSITE; PS00107; PROTEIN_KINASE_ATP; 1.
PROSITE; PS00109; PROTEIN_KINASE_TYR; 1.
PROSITE; PS00239; RECEPPOR_TYR_KIN_II; 1.
PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
Transferase; Tyrosine-protein kinase; Receptor; Transmembrane; Glycoprotein; ATP-binding; Phosphorylation; Repeat; Signal.
SIGNAL
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                                                                                                                                                                                                                                                                                                                                                  EXTRACELLULAR (POTENTIAL)
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Pfam; PF01030; Recep_L_domain; 2. PRINTS; PR00109; TYRKINASE. rvcbom; PD000001; Euk_pkinase; 1. SMART; SM00060; FN3; 3. SMART; SM00261; FU; 1.
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Copyright (c) 1993 - 2003 Compugen Ltd.
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Post-processing: Minimum Match 0%
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Listing first 45 summaries

sp_unclassified:* sp_human:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ALIGNMENTS

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NCBL_TaxID=6239;
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                                                                                                                                                                                                                                                                                               Genome sequence of the nematode C.elegans: A platform for
                                                                                                                                                                                                           Wilkinson J.; Submitted (JUN-1996) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR002561; EGF-like.
InterPro; IPR002919; TIL_Cysrich.
Pfam: PF01826; TIL; II.
PROSTITE; PS01186; EGF_2; UNKNOWN 1.
SEQUENCE 245 AA; 27785 MW; 781AEA77F9FE784C CRC64;
                                                                       Last sequence update)
Last annotation update)
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01-NOV-1996 (TrEMBLEEL 01,
01-NOV-1996 (TREMBLEEL 01,
01-JUN-2002 (TREMBLEEL 21,
F32D8.3 protein.
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Science 282:2012-2018(1998).
EMBL; Z74031; CAA98455.1; -.
HSSP; P56682; ICCV.
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Rhabditidae; Peloderinae; Caenorhabditis.
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Rhabditidae; Peloderinae; Caenorhabditis.
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Pred. No. 2e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Genome sequence of the nematode C.elegans: A platform for investigating biology."; Science 282:2012-2018(1998).
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Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases
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INCEPPOS TRR003645; FOLN.
INTERPOS TRR003919; TIL_CYSTICH.
INTERPOS TRR002919; TIL_CYSTICH.
INTERPOS TRO00519; TIL_CYSTICH.
SWART; SW00274; FOLN; 2.
PROSTIE; PS01186; EGF_2; UNKNOWN 3.
SEQUENCE 561 AA; 60751 MW; 46930233355972B2 CRC64;
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Last annotation update)
                                                                                                                                                                                                                                                  01-WAY-2000 (TrEMBLrel. 13, Created)
01-WAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
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MEDLINE-99069613; PubMed-9851916;
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36.8%;
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Science 282:2012-2018(1998).
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Caenorhabditis elegans.
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SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=6239;
                                                                             112 CPRTK 116
                            62 -PRSK 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                      09U1T6
                                                                                                                                                                                                                                  Q9U1T6;
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Legan P.K., Rau A., Keene J.N., Richardson G.P.;

Tectorins: modular matrix proteins of the inner ear homologous to components of the sperm-egg adhesion system.";

L. Biol. Chem. 272:8791-8801(1997).

R. Biol. Chem. 272:8791-8801(1997).

R. HSSP; P00736; LAPQ.

R. HSSP; P00736; LAPQ.

R. InterPro; IPR001507; Tecke.

R. InterPro; IPR001507; EdGP-like.

R. InterPro; IPR001507; Endoglin/CD105.

R. InterPro; IPR001507; Endoglin/CD105.

R. InterPro; IPR001507; Endoglin/CD105.

R. InterPro; IPR0018081; Nidogen.ext.

R. InterPro; IPR0018081; WWF-C.

R. InterPro; IPR0018081; WWF-C.

R. InterPro; IPR0018085; WWF-D.

R. Fami, PP01826; TILi. 3.

R. Fami, PP01826; TILi. 3.

R. Fami, PP01826; TILi. 3.

R. Fami, PP01826; TILi. 3.
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                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                   12 CPSNEIFSRCDGRC-QRFCPNV-VPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
7
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                                                                                                                                                                                                                                                                                                                    5;
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                                                                                                                                                                                                                                                               Length 626;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EGF-11ke domain; Glycoprotein.
SEQUENCE 2155 AA: 239535 MW; 86C5C09AA392B1C5 CRC64;
                                                                                                                                                                                                                                                                                                                       23; Indels
                                               Interpro; IPR000561; EGF-like.
Interpro; IPR000561; FOLN.
Interpro; IPR002919; TIL_Cysrich.
Pfam; PF01826; TIL; 4.
SMART; SM0274; FOLN; 2.
PROSITE; PS01186; EGF_2; UNKNOWN_3.
PRQUENCE 626 AA; 67881 MW; A17F7B445800E118 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART; SM00539; NIDO; 1.
SMART; SM00214; VNC; 1.
SMART; SM00216; VWD; 4.
SMART; SM00241; ZP; 1.
PROSITE; PS00070; ALDEHYDE_DEHYDR_CYS; UNKNOWN_1.
                                                                                                                                                                                                                                                               30.2%; Score 118; DB 5; 36.8%; Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT; 2155 AA
                                                                                                                                                                                                                                                                                                                       11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS01186; EGF_2; 3.
PROSITE; PS01286; PA58C_2; UNKNOWN_1.
PROSITE; PS00682; ZP_DOMAIN: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
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STRAIN-CD1; TISSUE-COCHLEA;
MEDLINE-97236843; Pubmed-9079715;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00100; zona_pellucida; 1.
SMART; SM00181; EGF; 1.
SMART; SM00539; NIDO; 1.
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04,
21,
EMBL; 298877; CAB54473.1; -. HSSP; P56682; 1CCV.
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                                                                                                                                                                                                                                                                                              Local Similarity 36.89 nes 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUL-1997 (TrEMBLrel.
01-JUL-1997 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
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chromosome 7q22 with the orthologous region on mouse chromosome 5."; Nucleic Acids Res. 29:1352-1365(2001).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wilson M.D., Riemer C., Martindale D.W., Schnupf P., Boright A.P., Cheung T.L., Hardy D.M., Schwartz S., Scherer S.W., Tsui L.-C., Miller W., Koop B.F.;
"Comparative analysis of the gene-dense ACHE/TFR2 region on human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cheung T.L., Wilson M.D., Koop B.F., Hardy D.M.; "Genomic Basis of Inter- and Intra-species Variation in Zonadhesin Domain Structure.";
                                                                                                                                                                                                                                                    Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28.9%; Score 113; DB 11; Length 5374; nilarity 37.5%; Pred. No. 8e-06; Conservative 8; Mismatches 22; Indels 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE: PS00022; EGF_1; UNKNOWN_1.
PROSITE: PS01186; EGF_2: 18.
PROSITE: PS50060; MAM_2.
EGF-Like domain; Glycoprotein.
SEQUENCE 5374 AA; 579536 MW; 90D2DBCFE5DE24EB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Last sequence update)
Last annotation update)
                                                           5374 AA
                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=129/SV;
MEDLINE=21138439; PubMed=11239002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR000998; MAM_domain.
InterPro; IPR00338; TiLa_Cysrich.
InterPro; IPR001999; TiL_Cysrich.
InterPro; IPR001007; VWF_C.
InterPro; IPR001846; VWF_D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00629; MAM; 3.
Pfam; PF01826; TIL; 25.
Pfam; PF02826; TIL; 25.
Pfam; PF02094; vwd; 4.
SMART; SM00001; EGF_like; 1.
SMART; SM00174; FOLN; 21.
SMART; SM00137; MAM; 3.
SMART; SM00137; WAW; 3.
                                                                                                             01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2002 (TrEMBLrel. 21, ZAN (Zonadhesin).
                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                           099ND0
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RESULT 5
                               099ND0
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RESULT 6 016488

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Gaps
                                                                                                 Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7;
                                                                                                                                                                                                  "Genome sequence of the nematode C. elegans: a platform for investigating biology. The C. elegans Sequencing Consortium."; Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 5; Length 166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25; Indels
                                                                                                                                                                                                                                                                STRAIN-BRISTOL N2;
Blanchard M., Bradshaw H.;
"The sequence of C. elegans cosmid B0238.";
submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                 Submitted (JUN-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AF016450; AAB65990.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF01826; TIL; 2.
PROSITE; PS01186; EGF_2; UNKNOWN_2.
Hypothetical protein.
SEQUENCE 166 AA; 17971 MW; DA92F2473442ADBD GRC64;
                                   01-JAN-1998 (TrEMBLrel. 05, Last sequence update) 01-JUN-2002 (TrEMBLrel. 21, Last annotation update) Hypothetical 18.0 kDa protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28.5%; Score 111.5; DB 5 36.8%; Pred. No. 4.8e-07;
166 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25; Conservative 11; Mismatches
                         (TrEMBLrel. 05, Created)
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01-MAY-1997 (TrEMBLrel. 03, Created)
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                               STRAIN=BRISTOL N2;
MEDLINE=99069613; Pubmed=9851916;
                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR00261; EGF-like.
InterPro; IPR002919; IIL_Cysrich.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-AUG-1998 (TrEMBLrel. 07, 01-JUN-2002 (TrEMBLrel. 21,
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
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                                                                                   Caenorhabditis elegans.
                                                                                                                                                                                                                                                                                                                                                        Waterston R.;
"Direct Submission.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. STRAIN=BRISTOL N2;
                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                          P56682; 1CCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                        NCBI_TaxID=6239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59 VCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OCVRQAQC 92
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                      01-JAN-1998 (
01-JAN-1998 (
01-JUN-2002 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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P90956
QQ
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EMBL, AR312032; AAK21011; -
InterPro; IPR000561; EGF-like.
InterPro; IPR003219; TLL_Cysrich.
InterPro; IPR003219; TLL_Cysrich.
InterPro; IPR003007; VWF_C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          229 CGANEQYSACFSSCQPSCQD-PSTPACPAPGCQPGCICLPGYIRRDSSPRSACVPRGLC 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12 CPSNEIFSRCDGRCQRFCPNVVPKPLC-IKICAPGCVCRLGYLR---NKKKVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
-!- SIMILARITY: BELONGS TO THE CU-2N SUPEROXIDE DISMUTASE FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28.0%; Score 109.5; DB 5; Length 949; 39.0%; Pred. No. 4.6e-06; Live 7; Mismatches 24; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27.9%; Score 109; DB 4; Length 915; 35.3%; Pred. No. 5.1e-06; ive 11; Mismatches 13; Indels :
                                                                                                                                                                                                                                                                                                                                     SMART: SM00211; TY; 1.
PROSITE; PS00317; 4_DISULFIDE_CORE; 1.
Alternative splicing; Copper; Oxidoreductase; Zinc.
SEQUENCE 949 AA; 103486 MW; C850B2886C98E5F5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SF_2; UNKNOWN_1.
99095 MW; E71BA4CFC32EEC98 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        915 AA
                                                                                                                    InterPro; IPR001424; SOD_CU_ZN.
InterPro; IPR000716; Thyroglobulin_1.
InterPro; IPR002919; TIL_Cysrich.
InterPro; IPR002221; WAP.
Pfam; PF000086; Sodeu; 1.
Pfam; PF000086; thyroglobulin_1; 1.
Pfam; PF010826; TIL. 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
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MEDLINE=21138439; PubMed=11239002;
                                EMBL; 281110; CAB03260.1; ·.
EMBL; 281110; CAB03259.1; ·.
HSSP; P56682; 1CCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2002 (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR001846; VWF_D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF01826; TIL; 3.
Pfam; PF02345; TILa; 2.
Pfam; PF00094; vwd; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART; SM00214; VWC; 2. SMART; SM00216; VWD; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS01186; EGF. SEQUENCE 915 AA; 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 24; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           452 CVPRSQCG 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60 CVPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zonadhesin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69BXN9
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210 ECPAYSSYTNCLPSCSPSCWDLDGRCE---GAKVP----SACAEGCICQPGYVLSEDK- 2260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 KCPSNEIFSRC------DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cheung T.L., Wilson M.D., Koop B.F., Hardy D.M.; "Genomic Basis of Inter- and Intra-species Variation in Zonadhesin Domain Structure.";
                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27.9%; Score 109; DB 4; Length 2601; 35.3%; Pred. No. 1.4e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2601 AA; 282429 MW; 6B97B524C67AABF4 CRC64;
                                                                                                                                                                                                                                               Cheung T.L., Wassler M.J., Cornwall G.A., Hardy D.M.; "Multiple Intra-species Variants of Human Zonadhosin."; Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.-i- SINILARITY: COUTAINS 3 MAM DOMAINS.
EMBL, AF332979; AAK01435.1; -. HSSP; P56682; ICCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
20nadhesin splice variant 5.
                                              01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT; 2601 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11; Mismatches
               PRT; 2601 AA
                                                                                                                                                                                                                                                                                                                                         InterPro; IPR000561; EGF-like.
InterPro; IPR000998; MAM_domain.
InterPro; IPR000998; MAM_domain.
InterPro; IPR003328; TiLa_Cysrich.
InterPro; IPR00319; TiLa_Cysrich.
InterPro; IPR002919; TiLa_Cysrich.
InterPro; IPR001846; VWF_D.
Pfam; PF00629; MAM; 3.
Pfam; PF01826; TiL; 4.
Pfam; PF01826; TiL; 4.
Pfam; PF01826; TiL; 4.
Pfam; PF019245; TiLa; 4.
Pfam; PF019217; PRICHEXTENSN.
SMART; SM00117; MAM; 3.
SMART; SM001137; MAM; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE: PS01186; EGF_2; UNKNOWN_3. PROSITE: PS00740; MAM_1; 1. PROSITE: PS50060; MAM_2; 3. GIJycoprotein. 2601 AA; 282429 MW; 6B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
               PRELIMINARY;
                                                                                                                                  Homo sapiens (Human).
                                                                                                  Zonadhesin variant 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2261 CVPRSQCG 2268
                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60 CVPRSKCG 67
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                                                                                                                                                                                                                                 TISSUE=TESTIS;
                                09BZ84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      096L86;
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               Q9BZ84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
Q96L86
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09BZ84
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2210 ECPAYSSYTNCLPSCSPSCWDLDGRCE---GAKVP-----SACAEGCICQPGYVLSEDK- 2260
                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                        11 KCPSNEIFSRC------DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                       Ouery Match 27.9%; Score 109; DB 4; Length 2601; Best Local Similarity 35.3%; Pred. No. 1.4e-05; Matches 24; Conservative 11; Mismatches 13; Indels 20;
Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                          2601 AA; 282353 MW; BB7712962F83DE04 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2624 AA; 284846 MW; 1ABB2256CC5A2BA3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cheung T.L., Wassler M.J., Cornwall G.A., Hardy D.M.;
"Multiple Intra-species Variants of Human Zonadhesin.";
Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
-: SIMILARIT: CONTAINS 3 MAM DOWAINS.
EMBL, AF322978; AAK01434.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT; 2624 AA.
               -!- SIMILARITY: CONTAINS 3 MAM DOMAINS.
EMBL; AY046055; AAL04412.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HSSP; P5682; ICCV.
InterPro; IPR000561; EGF-like.
InterPro; IPR000561; EGF-like.
InterPro; IPR002965; Prich_extensn.
InterPro; IPR002919; TIL_Cysrich.
InterPro; IPR001919; TIL_Cysrich.
InterPro; IPR001946; VWF_D.
Pfam; PF00629; MAM; 3
                                                                                                                                                                                        PROSITE; PS01186; EGF 2; UNKNOWN_3. PROSITE; PS00740; MAM_1; UNKNOWN_1. PROSITE; PS50060; MAM_2; 3.
                                            InterPro; IPR000561; BGF-1ike.
InterPro; IPR000998; MAM_domain.
InterPro; IPR001328; TILA_CYSrich.
InterPro; IPR001919; TIL_CYSrich.
InterPro; IPR001846; VWF_D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS01186; EGF_2; UNKNOWN_3. PROSITE; PS00740; MAM_1; 1. PROSITE; PS50060; MAM_2; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF02345; TILa; 4.
Pfam; PF00004; vwd; 4.
PRINTS; PR01217; PRICHEXTENSN.
SMART; SM00137; MAM; 3.
SMART; SM00216; VWD; 4.
                                                                                                                           Pfam; PF00629; MAM; 3.
Pfam; PF01826; TIL; 4.
Pfam; PF02345; TILa; 4.
Pfam; PF00094; vwd; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zonadhesin variant 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                     2261 CVPRSQCG 2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                        60 CVPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=TESTIS;
                                                                                                                                                                                                                                           Glycoprotein.
SEQUENCE 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ycoprotein
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RIC
CCC
CCC
DR
DR
DR
DR
MW
MW
SO
SO
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27.9%; Score 109; DB 4; Length 2624;

Query Match

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                                                                           2210 ECPAYSSYINCLPSCSPSCWDLDGRCE---GAKVP-----SACAEGCICQPGYVLSEDK- 2260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2210 ECPAYSSYTNCLPSCSPSCWDLDGRCE---GAKVP-----SACAEGCICQPGYVLSEDK- 2260
                       20; Gaps
                                                  11 KCPSNEIFSRC------DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11 KCPSNEIFSRC------DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. Cheung T.L., Wilson M.D., Koop B.F., Hardy D.M.; 'Genomic Basis of Inter- and Intra-species Variation in Zonadhesin
                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa: Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 27.9%; Score 109; DB 4; Length 2624; Best Local Similarity 35.3%; Pred. No. 1.4e-05; Matches 24; Conservative 11; Mismatches 13; Indels 20
 35.3%; Pred. No. 1.4e-05;
ive 11; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: CONTAINS 3 MAM DOMAINS.
EMBL; AY046055; AAL04414.1; --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2624 AA; 284770 MW; 79623C7E9441D549 CRC64;
                                                                                                                                                                                                                                                                                           01-DEC-2001 (TrEMBLrel. 19, Last sequence update) 01-JUN-2002 (TrEMBLrel. 21, Last annotation update) Zonadhesin splice variant 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                              PRT; 2624 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT; 2689 AA.
                                                                                                                                                                                                                                                                         01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR000561; EGF-11ke.
InterPro; IPR000998; MAM_domain.
InterPro; IPR003298; TILa_Cysrich.
InterPro; IPR001919; TIL_Cysrich.
InterPro; IPR001846; VWF_D.
Pfam; PF00629; MAM; 3.
Pfam; PF008245; TILa, 4.
Pfam; PF00094; vwd; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last seq
01-JUN-2002 (TrEMBLrel. 21, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PS01186; EGF_2; UNKNOWN_3. PROSITE; PS00740; MAM_1; UNKNOWN_1. PROSITE; PS50060; MAM_2; 3.
                24; Conservative
                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Domain Structure.";
                                                                                                                                                      2261 CVPRSOCG 2268
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2261 CVPRSQCG 2268
                                                                                                                      60 CVPRSKCG 67
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SEQUENCE 26
                                                                                                                                                                                                                                       Q96L87
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                                                                                                                                                                                                       RESULT 12
Q96L87
                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09BZ87
                                                                                                                      δλ
                                                                                                                                                      g
                                                                                                                                                                                                                                                         qq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
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PROSITE; PS00740; MAM_1; UNKNOWN_1
PROSITE; PS50060; MAM_2; 3.
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SEQUENCE 27
                                                                         Glycoprotein.
SEQUENCE 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q9BZ83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9BZ83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DD T T DD T DD T T DD T
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Cheung T.L., Wilson M.D., Koop B.F., Hardy D.M.;

T. "Genomic Basis of Inter- and Intra-species Variation in Zonadhesin
T. "Genomic Basis of Inter- and Intra-species Variation in Zonadhesin
T. Domain Structure.";

L. Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.

-!- SIMICARITY: CONTRINS 3 MAM DOMAINS.

REMBL: AY046055; AAL04415.1; -
R. InterPro; IPR000599; MAM domain.
R. InterPro; IPR001999; MAM domain.
R. InterPro; IPR001999; TIL_Cysrich.
R. InterPro; IPR001999; TIL_Cysrich.
R. InterPro; IPR001846; VWF_D.
R. Pfam; PF00629; MAM; 3.
R. Pfam; PF00629; MAM; 3.
R. Pfam; PF00829; TIL: 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 KCPSNEIFSRC------DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27.9%; Score 109; DB 4; Length 2689; 35.3%; Pred. No. 1.4e-05; Live 11; Mismatches 13; Indels 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2689 AA; 291353 MW; 7E12C3343BFD408C CRC64;
                                                                                                                                            01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-UNW-2002 (TrEMBLrel. 21, Last annotation update)
Zonadhesin splice variant 2.
                                                                                                                                                                                                                                                                                                                                                                                Interpro: IPR000998; MAM_domain.
Interpro: IPR000998; Prich_extensn.
Interpro: IPR003328; TiLa_Cysrich.
Interpro: IPR00219; TIL_Cysrich.
Interpro: IPR001846; VWF_D.
Pfam; PF004629; MAM; 3.
Pfam; PF00346; TIL; 5.
Pfam; PF00345; TIL; 5.
Pfam; PF00345; VWd, 4.
PRINTS; PR01217; PRICHEXTENSN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS01186; EGF_2; UNKNOWN_3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS01186; EGF_2; UNKNOWN_3.
PROSITE; PS00740; MAM_1; 1.
PROSITE; PS50060; MAM_2; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMART; SM00137; MAM; 3.
SMART; SM00216; VWD; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF02345; TILa;
Pfam; PF00094; vwd; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ||||||:||
| 2261 CVPRSQCG 2268
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60 CVPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycoprotein.
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                            SOW WHAT ARE NOT A WAY A
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2210 ECPAYSSYTNCLPSCSPSCWDLDGRCE---GAKVP-----SACAEGCICQPGYVLSEDK- 2260
                                                                                                                                                                                              27.9%; Score 109; DB 4; Length 2721;
35.3%; Pred. No. 1.4e-05;
live 11; Mismatches 13; Indels 20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11 KCPSNEIFSRC------DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                              27.9%; Score 109; DB 4; Length 2689;
35.3%; Pred. No. 1.4e-05;
Live 11; Mismatches 13; Indels 20; Gaps
                                                                                                                                                              11 KCPSNEIFSRC-----DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2721 AA; 295506 MW; 142E9CBF3D404EC3 CRC64;
2689 AA; 291277 MW; 2253CC9E22D7C45F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cheung T.L., Wassler M.J., Cornwall G.A., Hardy D.M.;
"Multiple Intra-species Variants of Human Zonadhesin.";
Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
--- SINILARITY: CONTAINS 3 MAM DOMAINS.
EMBL, AF832989; AAK01436.1;
HSSP; P56682; ICCV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT; 2721 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR000561; EGF-like.
InterPro; IPR000998; MAM_domain.
InterPro; IPR000998; MAM_domain.
InterPro; IPR0003928; Prich_extensn.
InterPro; IPR003919; TILa_Cysrich.
InterPro; IPR001846; VWF_D.
Pfam; PF00008; EGF; 1.
Pfam; PF00008; EGF; 1.
Pfam; PF000629; MAM, 3.
Pfam; PF000629; MAM, 3.
Pfam; PF000629; TILE; 4.
Pfam; PF00049; VWd, 4.
PRINTS; PR01217; PRICHEXTENSN.
SMART; SM00011; EGF_Like; 1.
SMART; SM00011; EGF_Like; 1.
SMART; SM00216; VWD; 4.
PROSITE; PS01086; EGF_L; UNKNOWN_1.
PROSITE; PS01186; EGF_2; UNKNOWN_4.
PROSITE; PS001060; MAM_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2002 (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 35.3%
nes 24; Conservative
                                                                                                                   24; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20nadhesin variant 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (Human)
                                                                                            Local Similarity
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TISSUE=TESTIS;
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Search completed: February 26, 2003, 15:05:43 Job time : 31 secs

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GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

February 26, 2003, 15:03:23 ; Search time 36 Seconds Run on:

(without alignments) 247.994 Million cell updates/sec

US-09-506-978-1 391 1 GGFGGLGGRGKCPSNEIFSR.....CRLGYLRNKKWCVPRSKCG Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

908470 seqs, 133250620 residues Searched:

908470 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

A_Geneseq_101002:*

1:	/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1980.DAT:*
5:	/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1981.DAT:*
.: 3	/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1982.DAT:*
٠.	/SIDS2/gcgdata/geneseg/genesegp-embl/AA1983.DAT:*
5:	/SIDS2/gcgdata/geneseg/genesegp-embl/AA1984.DAT:*
: 9	/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1985.DAT:*
7:	/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1986.DAT:*
 80	/SIDS2/gcgdata/geneseg/genesegp-embl/AA1987.DAT:*
	/SIDS2/gcgdata/geneseg/genesegp-emb1/AA1988.DAT:*
10:	/SIDS2/gcgdata/geneseq/genesegp-embl/AA1989.DAT:*
11:	/SIDS2/gcgdata/geneseq/genesegp-embl/AA1990.DAT:*
12:	/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1991.DAT:*
13:	/SIDS2/gcgdata/geneseq/genesegp-embl/AA1992.DAT:*
14:	/SIDS2/gcgdata/geneseq/genesegp-embl/AA1993.DAT:*
15:	/SIDS2/gcgdata/geneseq/genesegp-emb1/AA1994.DAT:*
16:	/SIDS2/gcgdata/geneseq/genesegp-embl/AA1995.DAT:*
17:	/SIDS2/gcgdata/geneseq/genesegp-embl/AA1996.DAT:*
18:	/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1997.DAT:*
19:	/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1998.DAT:*
20:	/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1999.DAT:*
21:	/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2000.DAT:*
22:	/SIDS2/gcgdata/geneseg/genesegp-emb1/AA2001.DAT:*
23:	/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		æ				
Result		Query				
No.	Score	Match	Match Length DB	DB	ID	Description
	391	100.0		23	ABB08330	Bee venom protein
2	391	100.0	69	23	ABB08331	Bee venom protein
3	391	100.0	7.1	23	ABB08332	Bee venom protein
4	391	100.0	73	23	ABB08333	Bee venom protein
5	391	100.0	92	21	AAY69209	Amino acid sequenc
9	108	27.6	3843	22	ABB71529	Drosophila melanog
7	107.5	27.5	2476	20	AAW67738	Pig p105 zona pel1
80	106.5	27.2	2594	16	AAW14748	IqG-Fc binding pro
6	106.5	27.2	2957	22	ABG22214	Novel human diagno
10	106.5	27.2	5405	16	AAW14749	IqG-Fc binding pro

human	Novel human diagno	Mature nematode ex	A. caninum nematod	AcaNAPc2. Ancylos	Nematode extracted	Nematode extracted	A. caninum nematod	el human	Drosophila Acp62F	Drosophila melanog	Human von Willebra	Sequence of von Wi	Sequence of human	Human von Willebra	Novel human secret	œ	Human gene 19 enco					Drosophila melanog	Nematode extracted	Mature nematode ex	A. ceylanicum nema	A. ceylanicum nema	Mature nematode ex	AceNAP4. Ancylost	×		Drosophila melanog	human	human	Novel human diagno	
ABG22216	ABG22215	AAY30432	AAB15317	AAR91701	AAY30393	AAY30454	AAB15346	ABG22213	AAY22170	ABB57966	AAY16462	AAP60053	AAP60462	AAU75317	AAU29530	AAE04265	AAE01650	AAE04268	AAE04266	AAE04263	ABB63313	ABB66725	AAY30399	AAY30422	AAB15293	AAB15307	AAY30435	AAR91710	AAY30384	ABB64069	ABB61389	ABG03631	ABG28308	ABG14849	
22	22	20	21	17	20	20	21	22	20	22	17	7		7	7	7	7	7	7	7	7	7	20	7		~	7	П	7	7	7	7	22	7	
7337	735	84	84	91	91	91	91	508	115	115	741	2813	2813	2813	2814	164	164	189	191	149	108	701	82	82	82	82	171	190	190	2009	178	1438	1438	1439	
26.0	S	Ω	S	S	S	2	S	2	S	S	Ŋ	S	S	25.1	S	4	4	Þ	4	4.	З.	ω,	23.3,	Э.	Э.		ω,	ω,	e,	-	ς.	~		2	
101.5	8	100	100	100	100	100	100	98.5	86	86	86	86	86	86	86	96	96	96	96	95.5	$^{\circ}$	92	91	91	91	91	91	91	91	88	\sim	7	87.5	_	
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	

ALIGNMENTS

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Bee venom; isoform; immunosuppressant; vaccine; Api m 6; immune response; bee venom hypersensitivity; antibody; protein purification; Api m 6.01; immunotherapy; allergen.
                                                                                                                                                                                                                                                                                                                                                                              New bee venom polypeptides, useful for modulating immune responses e.g. in individual hypersensitive to the venom and for identifying individual at risk for bee venom hypersensitivity -.
                                                                                                                                                                                                                                                                                                    (ECOL-) ECOLE POLYTECHNIQUE FEDERALE LAUSANNE.
                         ABB08330 standard; protein; 67 AA.
                                                                                                 Bee venom protein Api m 6.01.
                                                                                                                                                                                                                                                     16-FEB-2001; 2001WO-IB01736
                                                                                                                                                                                                                                                                            18-FEB-2000; 2000US-0506978
                                                                         18-JUN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-082988/11.
                                                                                                                                                                                                   WO200188085-A2,
                                                                                                                                                                                                                            22-NOV-2001.
                                                                                                                                                                                                                                                                                                                                 Spertini F;
                                                  ABB08330;
RESULT 1
             ABB08330
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designated Api m 6.01. The sequence represents the central amino acid ABB08333. Sequence shared by all four isoforms (see ABB08313, ABB08332 and ABB08333). The specification describes a substantially pure polypeptide, Api m 6, derived from bee venom and found in four isoforms. The proteins of the invention have immunosuppressant activity and may form the basis of a vaccine. Api m 6 is useful for modulating an immune response, i.e. as an allergen for immunotherapy. The protein is useful for identifying an individual at risk for bee venom hypersensitivity. The method comprises administering Api m 6 to the individual and measuring an immune response raised, where a detectable immune response indicates that the individual is at risk for bee venom hypersensitivity. Antibodies specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bee venom; isoform; immunosuppressant; vaccine; Api m 6; immune response; bee venom hypersensitivity; antibody; protein purification; Api m 6.02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New bee venom polypeptides, useful for modulating immune responses e.g. in individual hypersensitive to the venom and for identifying individual at risk for bee venom hypersensitivity
                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                 The present sequence is that of one the four isoforms of Api m 6,
                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                Ouery Match 100.0%; Score 391; DB 23; Length 67; Best Local Similarity 100.0%; Pred. No. 8e-32; Matches 67; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                for Abi m 6 are useful for purifying the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ECOL-) ECOLE POLYTECHNIQUE FEDERALE LAUSANNE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                Page 26; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB08331 standard; protein; 69 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 2; Page 26; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /label- Pro, Leu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bee venom protein Api m 6.02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= Pro,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-FEB-2001; 2001WO-IB01736.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .8-FEB-2000; 2000US-0506978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-JUN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunotherapy; allergen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-082988/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Misc-difference 69
                                                                                                                                                                                                                                                                                                67 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 VPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200188085-A2
              Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Spertini F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB08331;
                                                                                                                                                                                                                                                                                                    Sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Apis sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
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The present sequence is that of one the four isoforms of Api m 6, designated Api m 6.02. All four isoforms share a common central amimo acid sequence shared by all four isoforms (see ABB08330, ABB08332 and ABB08333). The specification describes a substantially pure polypeptide, Api m 6, derived from bee venom and found in four isoforms. The proteins of the invention have immunosuppressant activity and may form the basis of a vaccine. Api m 6 is useful for modulating an immune response, i.e. as an allergen for immunotherapy. The protein is useful for identifying an individual at risk for bee venom hypersensitivity. The method an individual stering Api m 6 to the individual and measuring an immune response rised, where a detectable immune response indicates that the individual is at risk for bee venom hypersensitivity. Antibodies specific for Abi m 6 are useful for purifying the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bee venom; isoform; immunosuppressant; vaccine; Api m 6; immune response; bee venom hypersensitivity; antibody; protein purification; Api m 6.03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence is that of one the four isoforms of Api m 6, addesignated Api m 6.03. All four isoforms share a common central amino acid sequence shared by all four isoforms (see ABB08330, ABB08331 and ABB08333). The specification describes a substantially pure polypeptide, ABB08333). The specification describes a substantially pure polypeptide, the invention hee venom and found in four isoforms. The proteins of the invention have immunosuppressant activity and may form the basis of a vaccine. Api m 6 is useful for modulating an immune response, i.e.
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immune responses
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                                                                                                                                                                                                                                                                                                                                       Length 69;
                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New bee venom polypeptides, useful for modulating
in individual hypersensitive to the venom and for
individual at risk for bee venom hypersensitivity
                                                                                                                                                                                                                                                                                                                                       100.0%; Score 391; DB 23;
100.0%; Pred. No. 8.2e-32;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ECOL-) ECOLE POLYTECHNIQUE FEDERALE LAUSANNE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 26; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABB08332 standard; protein; 71 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bee venom protein Api m 6.03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-FEB-2001; 2001WO-IB01736.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JUN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                 67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunotherapy; allergen.
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                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                    69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 VPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200188085-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABB08332;
                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                            Query Match
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comprises administering Api m 6 to the individual and measuring an immune response raised, where a detectable immune response indicates that the individual is at risk for bee venom hypersensitivity. Antibodies specific for Abi m 6 are useful for purifying the protein.

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Gaps

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Indels

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Length 73;

100.0%; Score 391; DB 23; 100.0%; Pred. No. 8.6e-32;

0; Mismatches

1 Similarity 100. 67; Conservative

Matches

73 AA;

Sequence Query Match Best Local 3

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as an allergen for immunotherapy. The protein is useful for identifying an individual at risk for bee venom hypersensitivity. The method comprises administering Api m 6 to the individual and measuring an immune response raised, where a detectable immune response indicates that the individual is at risk for bee venom hypersensitivity. Antibodies specific for Abi m 6 are useful for purifying the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       venom; isoform; immunosuppressant; vaccine; Api m 6; immune response; venom hypersensitivity; antibody; protein purification; Api m 6.04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       designated Api m 6.04. All four isoforms share a common central amimo acid sequence shared by all four isoforms (see ABB08330, ABB08331 and ABB08332). The specification describes a substantially pure polypeptide, Api m 6, derived from bee venom and found in four isoforms. The proteins of the invention have immunosuppressant activity and may form the basis of a vaccine. Api m 6 is useful for modulating an immune response, i.e. as an allergen for immunotherapy. The protein is useful for identifying an individual at risk for bee venom hypersensitivity. The method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New bee venom polypeptides, useful for modulating immune responses e.g. in individual hypersensitive to the venom and for identifying individual at risk for bee venom hypersensitivity
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          present sequence is that of one the four isoforms of Api m 6,
                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                              100.0%; Score 391; DB 23; Length 71; 100.0%; Pred. No. 8.4e-32;
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                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
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Misc-difference 72
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABB08333 standard; protein; 73 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'label= Pro, Leu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bee venom protein Api m 6.04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label= Pro,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-FEB-2001; 2001WO-IB01736
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                                                                                                                                                                                                                                                                                                                                                                                 67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunotherapy; allergen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-082988/11.
                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                 71 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 VPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200188085-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABB08333;
                                                                                                                                                                                                                                                     Seguence
                                                                                                                                                                                                                                                                                                                     Query Match
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Isolated nucleic acids encoding the bee venom protein PX3.101 useful for treating autoimmune and inflammatory disorders such as rheumatoid arthritis \cdot
                                                                                                                                                                                                                                                                                          CXCR1, CXCR2, cyclooxygenase, lipoxygenase; phospholipase; protease; inflammatory disease; gene therapy; cancer; autoimmune disease; pain; chemokine imbalance; rheumatoid arthritis; multiple sclerosis; pain; psoriasis; systemic lupus erythematosus; Crohn's disease; vasculitis; scleroderma; metastatic cancer; Alzheimer's disease; wound healing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents the protein PX3.101, which is a honey bee venom isolated Apis mellifera. PX3.101 inhibits the binding of interleukin-8 (IL-8) to its receptor (e.g. CXCR1 and CXCR2) and inhibits a variety of enzymes (e.g. cyclooxygenases, lipoxygenases, phospholipases and proteases) associated with inflammatory diseases. The nucleic acids may be used for the recombinant production of
               GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                 Protein PX3.101; honey bee; venom; interleukin-8; IL-8; receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "this region contains 5 GGX repeats"
                                                                                                                                                                                                                                                    Amino acid sequence of honey bee venom PX3.101 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                               AAY69209 standard; Protein; 92 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Fig 3A-B; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (PANP-) PAN PACIFIC PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99GB-0021605.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0100172.
                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                      aging process; antigen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note=
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                                                          67
                                                                                       VPRSKCG 71
                                                                                                                                                                                                                                                                                                                                                                                                 Apis mellifera.
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                                                          61 VPRSKCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-SEP-1998;
                                                                                                                                                                                                                          30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GB2341389-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-MAR-2000
                                                                                                                                                                                             AAY69209;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide
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                                                                                                                                     RESULT 5
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                           or in vitro (as a fermentation culture). The nucleic acids may also be used as probes to identify similar sequences in samples. The PX3.101 protein may be used for the treatment of inflammatory diseases, cancers,
                                                                                                               description of a second second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
PX3.101 proteins either in vivo (as part of a gene therapy protocol)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Drosophila; developmental biology; cell signalling; insecticide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 391; DB 21; Length 92; 100.0%; Pred. No. 1e-31; ive 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Drosophila melanogaster polypeptide SEQ ID NO 41379.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAR-2000; 2000US-191637P.
11-JUL-2000; 2000US-0614150.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0
Best Local Similarity 100.0
Matches 67; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    92 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence represents a pig sperm egg-binding protein designated protein p105. Porcine sperm proteins which bind the zona pellucida in a species-specific manner were isolated. Separation by gel electrophoresis resulted in bands of proteins with molecular weights of 130, 150 and 170 kb, under native conditions but bands of 105 and 45 kD were observed when the proteins were separated under denaturing conditions. Compounds which bind these proteins can be used for contraception or fertilisation.
             (ABB57737-ABB72072).
The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                            sperm; egg-binding protein; zona pellucida; contraception;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1455 KCPSGSSYSTCANPCPATCLSLNNPSYCPSTLP-----CAEGCECQKGHILSGTS-CV 1506
                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -- QRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKVCV 61
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                                                                                                                                                                          11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKC
                                                                                                                     Length 3843;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encoding porcine sperm egg-binding protein - useful for
sequences (ABL01840-ABL16175) and the encoded proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18;
                                                                                                                  27.6%; Score 108; DB 22;
33.9%; Pred. No. 0.035;
iive 7; Mismatches 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 107.5; DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 0.02
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                Pig p105 zona pellucida-binding protein.
                                                                                                                                                                                                                                                                            AAW67738 standard; Protein; 2476 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Fig 8A-B; 47pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               producing recombinant protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94US-0276967.
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                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hardy DM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-080410/07.
                                                                                       3843 AA;
                                                                                                                               Local Similarity
es 19; Conserv
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les 22; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                           Pig; porcine;
fertilisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUL-1994;
                                                                                                                                                                                                                                                                                                                                     16-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US5851817-A.
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                                                                                        Sequence
                                                                                                                                                                                                                                                                                                        AAW67738;
                                                                                                                   Query Match
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1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                   Fragment 13; pNV11-ST; IgG-Fc binding protein; immunoglobulin; K17; human; colonic epithelium; monoclonal antibody; K9; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA derived from colonic epithelium encoding IgG-Fc binding protein - used in the mapping and analysis of IgG-Fc binding protein mRNA \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27.2%; Score 106.5; DB 16; Length 2594; 36.8%; Pred. No. 0.035; Live 6; Mismatches 29; Indels 1;
                                                                                                                                         IgG-Fc binding protein encoded by 7.8 kb fragment of pNV11-ST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 71-84; 132pp; Japanese.
                                                 AAW14748 standard; Protein; 2594 AA
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                                                                                                                                                                                                                                                                                                                                     95JP-0109927.
                                                                                                                                                                                                                                                                                                                                                  94JP-0129487
                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                               (CHUS ) CHUGAI SEIYAKU KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-FEB-2002 (first entry)
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Matches 21; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2594 AA;
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                                                                                                             13-MAY-1997
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                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                     03-APR-1995;
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24-AUG-1994;
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                                                                                                                                                                                                                                                                          12-OCT-1995
                                                                                 AAW14748;
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                       RESULT 8
                                     AAW14748
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polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The and gene mapping, and in recombinant production of (II). The control of (II) is useful in gene therapy techniques for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving control of (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and (II) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and anno acid sequences. ABG00010-ABG30377 represent novel human when the environment of the inventor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG 67
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Pred. No. 0.039;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to isolated polynucleotide (I) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 20; SEQ ID No 52573; 103pp; English.
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                                                                                                                                                                                                                                                                        31-MAR-2000; 2000US-0540217.
23-AUG-2000; 2000US-0649167.
                                                                                                                                                                                                     30-MAR-2001; 2001WO-US08631
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-639362/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Drmanac RT, Liu C,
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                                                                                                                                                                                                                                                                                                                                                                                    (HYSE-) HYSEQ INC
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                                                               WO200175067-A2:
Homo sapiens.
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the invention literates. Considered polymorescue (1) and the polymerase chain reaction (PCR) primers, oligomers, and for chromosome cand gene mapphing, and in recombinant production of (II). The and gene mapphing, and in recombinant production of (II). The cand gene mapphing, and in recombinant production of (II). The consideration of (II) or to treat disease states agrees to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or constraining a polypeptide in tissue, as molecular weight markers and as constituted and polymorleotide sequences are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymorleotide sequences have applications in diagnostics, forensics, gene mapphing, identification of mutations of and to produce other types of data and products dependent on DNA and amino acid sequences. Abgolog-ABG30377 represent novel human can diagnostic amino acid sequences of the invention.

Conditional data and product of machined content types of the invention.

Conditional data and product or appear in the printed specification, but was obtained in abectronic format directly from WIPO content fip.wipo.int/pub/published_pot_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG 67
                  diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
New isolated polynucleotide and encoded polypeptides, useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26.0%; Score 101.5; DB 22; Length 7337; 31.6%; Pred. No. 0.27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28; Indels
                                                                                                                            The invention relates to isolated polynucleotide (I) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 31.6%; Pred. No. 0.27
Matches 18; Conservative 10; Mismatches
                                                                                            Claim 20; SEQ ID No 52575; 103pp; English.
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23-AUG-2000; 2000US-0649167.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7337 AA;
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                                                            biodiversity
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                        diagnostics,
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         epithellum. This sequence was isolated using the sequence given in AAW14748. mRNA isolated from human colonic epithellal tissue was used to prepare a cDNA library. This was screened using monoclonal antibodies K9 and K17 which bind to the large and small components of the binding protein. Active clones, see also AAT63077-81, were used to derive probes for screening a second DNA library from human colonic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27.2%; Score 106.5; DB 16; Length 5405; 36.8%; Pred. No. 0.066; tive 6; Mismatches 29; Indels 1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents the IgG-Fc binding protein of human colonic
                                                                                                                                                                                                                                                                                                                 DNA derived from colonic epithelium encoding IgG-Fc binding protein - used in the mapping and analysis of IgG-Fc binding protein mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                         Claim 3; Page 86-113; 132pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel human diagnostic protein #22207.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABG22216 standard; Protein; 7337 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tang YT;
                                                                                                                                     94JP-0129487.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAR-2001; 2001WO-US08631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAR-2000; 2000US-0540217.
23-AUG-2000; 2000US-0649167.
                                                                                95WO-JP00638.
                                                                                                                  95JP-0109927.
                                                                                                                                                      94JP-0222547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-FEB-2002 (first entry)
                                                                                                                                                                                          (CHUS ) CHUGAI SEIYAKU KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 36.8
Matches 21; Conservative
                                                                                                                                                                                                                              Harada N, Morikawa M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drmanac RT, Liu C,
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                                                                                                                                                                                                                                                                  WPI; 1995-358632/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5405 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  epithelial tissue.
                                                                                                                                                                                                                                                                                  N-PSDB; AAT63074.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-OCT-2001.
           WO9527057-A1
                                                                                                                    30-MAR-1995;
                                                                                                                                     01-APR-1994;
                                                                                                                                                    24-AUG-1994;
                                                                                03-APR-1995;
                                             12-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABG22216;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 11
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RESULT 14
AAB15317
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polymerase chain reaction (PCR) primers. Journal of the configuration probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The configuration of (II) and gene mapping, and in recombinant production of (II). The configuration of (II) and for identifying expressed genes, (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and (II) are useful for madical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynuclectide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human when the configuration and amino acid sequences of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       :||::::|| | ||::|| | ||:|| || |||| ||:::|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:||
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responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25.7%; Score 100.5; DB 22; Length 735; 31.6%; Pred. No. 0.046; artive 10; Mismatches 28; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nematode extracted anticoagulant protein; NAP; anticoagulant; serine protease inhibitor; NAP domain; factor VIIa/TF.
                                                                                                                     invention relates to isolated polynucleotide (I) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mature nematode extracted anticoagulant protein AcaNAPc2.
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Lauwereys MJ, Messens JHL, Moyle M, Stanssens PEH;
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                                                                  20; SEQ ID No 52574; 103pp; English.
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95US-0486397.
95US-0486399.
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95US-0461965.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 735 AA;
                        biodiversity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-APR-1996;
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Best Local
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The present sequence represents a nematode extracted anticoagulant and protein (MAP). The protein has activity as an anticoagulant and/or serine protein (MAP). The protein contains at least one NAP domain which has selective inhibitory activity for factor VIIA/TF. The specification describes a method for screening an isolated protein at least one domain for factor VIIA/TF selective inhibitory activity. The method comprises determining the time to clotting an isolated protein of the clotting the time to clotting a concentration of the isolated protein in an ex vivo prothrombin time (PT) assay and an ex vivo prothogration of clotting effected by the isolated protein in each of the prolongation of clotting effected by the isolated protein in each of cach assay, where prolongation of clotting is calculated as fold elevation of clotting time relative to a baseline clotting value, where a calculating a PT to aptT prolongation ratio, where a ratio at least cone is indicative of factor VIIA/TF inhibitory activity. The method is a relief for a privity the method is a relief or a privity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 100; DB 20; Length 84;
Pred. No. 0.0079;
8; Mismatches 24; Indels 16; Gaps

    A. caninum nematode-extracted anticoagulant protein AcaNAPc2(mature).

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nematode-extracted anticoagulant protein; AcaNAPc2; blood clotting; canine hookworm; thrombosis; vaccine.
                                                      Screening an isolated protein for Nematode-extracted Anticoagulant
                                                                                                                                                    Disclosure; Columns 142-144; 197pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB15317 standard; Protein; 84 AA.
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97US-0809455.
94US-0326110.
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Best Local Similarity 30.45
Matches 21; Conservative
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WPI; 1999-539569/45.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84 AA;
                                                                                       Protein domains
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05-JUN-1995
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Lauwereys MJ, Stanssens PEH, Jespers LS, Gansemans YGJ, Moyle M;

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                                                                                                                         The present sequence is the Ancyclostoma caninum nematode-extracted anticogulant protein AcaNAPC2. Proteins of this kind have been shown to be effective at preventing blood clotting without causing excessive bleeding. The protein can be used in blood collection tubes to aid the isolation of plasma from the blood, to prevent thrombosis which may be linked to the rupture of an atherosclerotic plaque, acute myocardial infaction, angina, thrombolytic therapy, percutaneous transluminal coronary angioplasty, disseminated intravascular coaquiopathy, infection, cancer and septic shock, and to produce antibodies. In the latter instance, the antibodies can be raised in order to detect infection by nematodes (the coding sequence can also be used for this) or as diagnostic tests. The protein can also be used as a vaccine against
                                                                                                                                                                                                                                                                                                                                    16; Gaps
                                                                                                                                                                                                                                                                                                                                                                         New cDNA molecule encoding a protein having factor Xa inhibitory activity for preventing and treating blood clotting disorders, comprises nematode-extracted anticoagulant protein domains -
                                                                                                                                                                                                                                                                                                            Score 100; DB 21; Length 84; Pred. No. 0.0079; 8; Mismatches 24; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AcaNAP; HpoNAP; NamNAP; AceNAP; AduNAP; anticoagulant; nematode-extracted anticoagulant protein; serine protease; nematode; thrombosis; parasitic worm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jespers LS, Laroche YR; Moyle M, Stanssens PEH;
LaRoche YR, Vlasuk GP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR91701 standard; Protein; 91 AA.
                                                                                                      Example A; Fig 16; 197pp; English.
                                                                                                                                                                                                                                                                                                            25.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94US-0326110.
95US-0461965.
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Vlasúk GP;
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95US-0486397
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Messens JHL,
                                                                                                                                                                                                                                                                                                                                    21; Conservative
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                      WPI; 2000-531359/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ancylostoma caninum.
                                                                                                                                                                                                                                                                   nematode parasites.
                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                        84 AA;
                                                                                                                                                                                                                                                                                                                                                                                                         58 KVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                              62 DKCVSAEDC 70
                                 N-PSDB; AAA73373
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-1995;
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05-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUN-1995
Bergum PW,
                                                                                                                                                                                                                                                                                         Sequence
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Proteins with anticoagulant and/or serine protease inhibitory activity, isolated from nematodes, are useful to inhibit blood activity, isolated from nematodes, are useful to inhibit blood coogulation. The proteins can be added to blood collection tubes defining the collection of mammalian plasma. They are also useful to prevent or inhibit thrombosis, and may be given alone or in combination with other therapeutic or in vivo diagnosit agents. The proteins can serve as immunogens to raise antibodies for use in the diagnosis and identification of NAP concon. Levels in biological fluids, e.g. to detect mammalian infection with a parasitic worm. They can also be used as immunogens in prophylactic and therapeutic vaccines against parasitic worm infection. The proteins may double the clotting time of human plasma in prothrombin time assays when present at 10-50 nMol, and double the clotting time of human clasma in activated partial thrombin time assays when present at 10-100 nMol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24; Indels 16; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 KCPSNEIFSRCDGR-CQRFC------PNVVPKPLCIKICAPGCVCRLGYLRNKK 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The anticogulant proteins are pref. derived from Ancylostoma caninum, A. ceylanicum, A. duodenale, Necator americanus or Heligomosmoides polygyrus.
The proteins pref. have 2 NAP domains and specifically inhibit the catalytic activity of the factor VIIa/TF complex in the presence of factor Xa or a catalytically inactive factor Xa deriv., do not specifically inhibit the activation of factor VIIa in the absence of TF and do not specifically inhibit then activation of factor VIIa in the
                                                                                                                     Proteins with anticoagulant and/or serine protease inhibitory activity - isolated from nematodes and useful to inhibit blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 100; DB 17; Length 91;
Pred. No. 0.0085;
8; Mismatches 24; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search completed: February 26, 2003, 15:05:08
Job time : 39 secs
                                                                                                                                                                                                                                                                                           Claim 89 + 96; Fig 9; 243pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25.6%;
30.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
WPI; 1996-222007/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         58 KVCVPRSKC 66
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                                           N-PSDB; AAT12947
                                                                                                                                                                                                        coagulation
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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

February 26, 2003, 15:05:12 ; Search time 33 Seconds
(without alignments)
76.587 Million cell updates/sec Run on:

US-09-506-978-1 Perfect score:

1 GGFGGLGGRGKCPSNEIFSR......CRLGYLRNKKKVCVPRSKCG Sedneuce:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters: 174566 seqs, 37721826 residues

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Maximum Match 100% Listing first 45 summaries Post-processing: Minimum Match 0%

Database :

/cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*
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/cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*
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/cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO9_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO9_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO9_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/USO1_NEW_PUB.pep:* /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*/cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:* Published_Applications_AA:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Sequence 1116, Ap Sequence 1, Appli Sequence 2, Appli Sequence 2, Appli Sequence 6, Appli Sequence 18, Appl Sequence 16, Appl Sequence 16, Appl Sequence 17, Appl Sequence 16, Appl Sequence 17, Appl Sequence 16, Appl
ID	US-10-025-380-1116 US-09-922-217-1116 US-09-381-261A-1 US-09-8816-900-2 US-10-189-971-6 US-10-189-971-6 US-10-189-971-18 US-10-189-971-18 US-10-189-971-18 US-10-189-971-14 US-10-189-971-17
DB	100 100 100 100 100 100 100 100 100 100
% Query Match Length DB	5405 5405 5405 2813 2813 2813 1057 11207 11212 11312 11512 1153 1153 1153 1153 1
% Query Match	22.22 22.22 22.22 22.22 22.22 22.22 22.22 23.22 24.22 24.22 25.22 26.22 27.22
Score	106.5 106.5
Result No.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

_	Sequence 54, Appl Sequence 2, Appli	Sequence 13, Appl	Sequence 15, Appl	Sequence 1068. Ap	Sequence 1068. An	Sequence 1068, Ap	Sequence 103, App	103,	20, A	3		Sequence 441, App	Sequence 13, App)	Sequence 114, App	a	.09		100,		×	Sequence 9. Appli	Segmence 1. Appli	. 4	52,
9 US-09-950-933A-46	06-60-SD					.0 US-09-833-263-1068			US-09-870-759-120		US-10-084-994-11	US-09-759-130B-441	.0 US-09-908-322-13	-	.0 US-09-901-940-2		D	US-09-796-753	0S			08-09-766-77	US-09-924-340-48	US-09-924-340-52
	855 1																							
20.1	19.6	19.3				19.3	18.4	18.4									16.8				16.4		16.4	16.4
78.5	76.5	75.5	75.5			75.5	72	72	72	7.1	7	68.5	29	99	99	65.5	'n.	65	65	64	64	64	64	64
20	22	23	24	25	26	27	28	29	30	31	32	. 33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: CATTER, DATRICK
TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
TITLE OF INVENTION: OP COLOD CANCER AND METHODS FOR THEIR USE
FILE REFERENCE: 210121.471C14
CURRENT APPLICATION NUMBER: US/10/025,380
CURRENT FILING DATE: 2001-12-19
NUMBER OF SEQ ID NOS: 1129
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1116
LENGTH: 5405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27.2%; Score 106.5; DB 9; nilarity 36.8%; Pred. No. 0.027; Conservative 6; Mismatches 29;
                               Sequence 1116, Application US/10025380
Publication No. US20020182191A1
GENERAL INFORMATION:
APPLICANT: Lodes, Michael J.
APPLICANT: Secrist, Heather
APPLICANT: Benson, Darin R.
APPLICANT: Secrist, Madeleine Joy
APPLICANT: Stolk, John A.
APPLICANT: Stolk, John A.
APPLICANT: Stolk, John A.
APPLICANT: Stolk, John A.
APPLICANT: Smith, Carole L.
APPLICANT: Smith, Carole L.
APPLICANT: King, Gordon E.
APPLICANT: Clapper, Jonathan D.
APPLICANT: Sking, Ajun
APPLICANT: Sking, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fanger, Gary R.
Vedvick Thomas S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens
US-10-025-380-1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
US-10-025-380-1116
                                                                                                                                                                                                                                                                                              APPLICANT:
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qq

695 MDERGDCVPKAQC 707

qq

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22.4%; Score 87.5; DB 10; Length 2813; 31.0%; Pred. No. 0.99; Live 10; Mismatches 29; Indels 1;
                                                                                                                                                                     Yuzbasiyan-Gurkan, vilma
Schall, William D
Brewer, George J
TITLE OF INVENTION: DNA ENCODING CANINE VON WILLEBRAND
FACTOR AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Harness, Dickey & Pierce, P.L.C.
STREET: 5445 Corporate Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 2115-001226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
REPLICATION NUMBER: US/09/886,900
FILING DATE: 21.Jun-2001
CLASSIFICATION: <unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/189,971 CURRENT FILLING DATE: 2002-07-03 PRIOR APPLICATION NUMBER: US 60/302,949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/896,449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
;
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-886-900-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 248-641-1600
TELEFAX: 248-641-0270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 18-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Smith, DeAnn F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 22, Application US/10189971; Publication No. US20030028907A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 2813 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
                                                                            Sequence 2, Application US/09886900; Patent No. US20020137051A1; GENERAL INFORMATION:
                                                                                                                                                        APPLICANT: Venta, Patrick J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: LEX-0360-USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 31.0%
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: Michigan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 287637
                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA ZIP: 48098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-189-971-22
                                                          US-09-886-900-2
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                                        RESULT 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 GRG-------KCPSNEIFSRCDGRCQRFCPNV-VPKPLCIKICAPGCVCRLGYL 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db 1531 ECPPINSHYELCADTCSLGCSALSAPPQCQDGCAEGCQCDSGFLYN-GQACVP1QQCG 1586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: LOSCALZO, JOSEPH
APPLICANT: LOSCALZO, JOSEPH
APPLICANT: LOSCALZO, AIGH
TITLE OF INVENTION: No. US20020123457A1el Anti-Platelet Agent
FILE REFERENCE: 102258.327
CURRENT APPLICATION NUMBER: US/09/381,261A
CURRENT FILING DATE: 1999-12-07
PRIOR APPLICATION NUMBER: PCT/US99/06092
PRIOR APPLICATION NUMBER: PCT/US99/06092
PRIOR APPLICATION NUMBER: US 60/046,981
PRIOR FILING DATE: 1998-03-27
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 1
LENGTH: 2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         / Match 25.1%; Score 98; DB 10; Length 2813; Local Similarity 26.0%; Pred. No. 0.098; nes 19; Conservative 13; Mismatches 27; Indels 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 27.2%; Score 106.5; DB 10; Length 5405; Local Similarity 36.8%; Pred. No. 0.027; les 21; Conservative 6; Mismatches 29; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE FILE REFERENCE: 210121.4714.33

CURRENT APPLICATION NUMBER: US/09/922,217

CURRENT FILING DATE: 2001-08-03

NUMBER OF SEQ ID NOS: 1124

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 1116

LENGTH: 5405
                                        Sequence 1116, Application US/09922217 Patent No. US20020076414A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/09381261A; Patent No. US20020123457A1
                                                                                                                                                                                      Benson, Darin R.
Meagher, Madeleine Joy
                                                                                                                                                                                                                                                                                       Jiang, Yuqiu
Smith, Carole Lynn
King, Gordon E.
Wang, Aijun
                                                                                                                  APPLICANT: Xu, Jiangchun APPLICANT: Lodes, Michael J.
                                                                                                                                                                  Secrist, Heather
                                                                                                                                                                                                                                    Stoľk, John A.
Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               54 RNKKKVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
US-09-922-217-1116
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                                                                                              GENERAL INFORMATION:
                         US-09-922-217-1116
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US-09-381-261A-1
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US-09-381-261A-1
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APPLICANT:
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APPLICANT:
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APPLICANT:
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RESULT 2
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APPLICANT: Walke, D. Wade
APPLICANT: Scoville, John
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: No. US20030028907Alel Human Kielin-like Proteins and Polynucle
TITLE OF INVENTION: Same
                                      292 RPACPAGMEYKECVSPCTRTCQSLHVKEVCQEQCVDGCSCPEGQLLDEGH-CVGSAEC 348
9 RGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKC 66
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Sequence 20, Application US/10189971

Sequence 20, Application US/10189971

Publication No. US20030028907A1

GENERAL INFORMATION:

APPLICANT: Walke, D. Wade

APPLICANT: Turner, C. Alexander Jr.

TITLE OF INVENTION: Same

TITLE OF INVENTION: Same

FILE REFERENCE: LEX-0360-USA

CURRENT APPLICATION NUMBER: US/10/189,971

PRIOR APPLICATION NUMBER: US 60/302,949

PRIOR APPLICATION NUMBER: US 60/315,634

PRIOR PLILNG DATE: 2001-07-03

PRIOR APPLICATION NUMBER: US 60/315,634

PRIOR PRILNG DATE: 2001-07-03

NUMBER OF SEQ ID NOS: 25

SOFTWARE: FRASESQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                           Query Match 21.7%; Score 85; DB 9; Length 1192; Best Local Similarity 30.6%; Pred. No. 0.82; Matches 19; Conservative 8; Mismatches 27; Indels
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                                                                                                                                                                                                                                                                                                                                                                          0.82;
...hes 27; Indels
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          CURRENT APPLICATION NUMBER: US/10/189,971
CURRENT FILLNG DATE: 2002-07-03
PRIOR APPLICATION NUMBER: US 60/302,949
PRIOR FILING DATE: 2001-07-03
PRIOR APPLICATION NUMBER: US 60/315,634
PRIOR FILING DATE: 2001-08-29
NUMBER OF SEQ. ID NOS: 25
SOFTWARE: FASTSEQ for Windows Version 4.0
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APPLICANT: Walke, D. Wade; APPLICANT: Scoville, John APPLICANT: Turner, C. Alexander Jr.
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US-10-189-971-20
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LENGTH: 1192
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LENGTH: 1207
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US-10-189-971-20
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US-10-189-971-16
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APPLICANT: Walke, D. Wade
APPLICANT: Scoville, John
TTPLICANT: Turner, C. Alexander Jr.
TTPLICANT: Turner, C. Alexander Jr.
TTTLE OF INVENTION: Same
FILE REFERENCE: LEX -0360-1087
CURRENT APPLICATION NUMBER: US, 10/10/189, 971
CURRENT FILING DATE: 2002-07-03
PRIOR FILING DATE: 2000-07-03
PRIOR FILING DATE: US, 60/315, 634
PRIOR FILING DATE: 2001-08-29
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APPLICANT: Scoville, John
APPLICANT: Scoville, John
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: No. US20030028907A1el Human Kielin-like Proteins and Polynucleoti
TITLE OF INVENTION: Same
FILE REFERENCE: LEX-0360-USA
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                                                                                                                                                                                                                                                                      Ouery Match 21.7%; Score 85; DB 9; Length 759; Best Local Similarity 30.6%; Pred. No. 0.55; Matches 19; Conservative 8; Mismatches 27; Indels
PRIOR FILING DATE: 2001-07-03
PRIOR APPLICATION NUMBER: US 60/315,634
PRIOR FILING DATE: 2001-08-29
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 759
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 6
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. Sequence 18. Application US/10189971
. Publication No. US20030028907A1
. GENERAL INFORMATION:
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; Sequence 6, Application US/10189971
; Publication No. US20030028907A1
; GENERAL INFORMATION:
                                                                                                                                                                                                    ; ORGANISM: homo sapiens US-10-189-971-22
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Sequence 10, Application US/10189971

Sequence 10, Application US/203002890741

Sequence 10, Application No. US2003002890741

Septication No. US20030028907A1

Septicant: Walke, D. Wade

APPLICANT: Walke, D. Wade

APPLICANT: Turner, C. Alexander Jr.

TITLE OF INVENTION: Same

TITLE OF INVENTION: Same

TITLE OF INVENTION: Same

CURRENT APPLICATION NUMBER: US/10/189,971

CURRENT APPLICATION NUMBER: US 60/302,949

PRIOR APPLICATION NUMBER: US 60/302,949

PRIOR APPLICATION NUMBER: US 60/315,634

PRIOR APPLICATION NUMBER: US 60/315,634

NUMBER OF SEQ ID NOS: 25

SOFTWARE: FastSEQ for Windows Version 4.0
                                     APPLICANT: MOINT, MOINT
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Pred, No. 0.98;
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Matches 19; Conservative
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         APPLICANT: Walke, D. Wade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: homo sapiens
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ORGANISM: homo sapiens
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Best Local Similarity
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US-10-189-971-14
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Sequence 24, Application US/10189971

Sequence 24, Sequence 24, Sequence 24, Sequence 24, Sequence 24, Sequence 24, Sequence 26, Sequence 26, Sequence 26, Sequence 26, Sequence 27, Sequenc
TITLE OF INVENTION: No. US20030028907Alel Human Kielin-like Proteins and Polynucleoti TITLE OF INVENTION: Same
FILE REFERENCE: LEX-0360-USA
CURRENT APPLICATION NUMBER: US/10/189,971
CURRENT APPLICATION NUMBER: US 60/302,949
PRIOR PILING DATE: 2001-07-03
PRIOR PILING DATE: 2001-07-03
PRIOR PILING DATE: 2001-08-29
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FastSEQ for Windows Version 4.0
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; Sequehce 8, Application US/10189971
; Publication No. US20030028907A1
; GENERAL INFORMATION:
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US-10-189-971-16
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1567 AC 1568
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LENGTH: 1593
                                            RESULT 15
US-10-189-971-4
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Sequence 14, Application US/10189971
; Publication No. US20030028907A1
; GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Walk, D. Wade
; APPLICANT: Scoville, John
TITLE OF INVENTION: No. US20030028907A1el Human Kielin-like Proteins and Polynuclecti;
TITLE OF INVENTION: No. US20030028907A1el Human Kielin-like Proteins and Polynuclecti;
TITLE OF INVENTION: No. US20030028907A1el Human Kielin-like Proteins and Polynuclecti;
TITLE OF INVENTION: No. US20030028907A1el
CURRENT PFLICATION NUMBER: US 60/302,949
PRIOR FILING DATE: 2001-07-03
; PRIOR FILING DATE: 2001-07-03
; PRIOR FILING UNTE: 2001-08-29
: NUMBER OF SEQ ID NOS: 25
: SOFTWARE: FastSED for Windows Version 4.0
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APPLICANT: Scoville, John
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: No. US20030028907Alel Human Kielin-like Proteins and Polynucleoti
TITLE OF INVENTION: Same
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CURRENT APPLICATION NUMBER: US/10/189,971
CURRENT FILING DATE: 2002-07-03
PRIOR APPLICATION NUMBER: US 60/302,949
PRIOR FILING DATE: 2001-07-03
PRIOR FILING DATE: 2001-07-03
PRIOR FILING DATE: 2001-08-29
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FestSEQ for Windows Version 4.0
SEQ ID NO 12
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Matches 19; Conservative
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LENGTH: 1535
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US-10-189-971-12
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1 GGFGGLGGRGKCPSNEIFSR......CRLGYLRNKKKVCVPRSKCG
GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.
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Gapop 10.0 , Gapext 0.5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score 391 391 391 391	Address Match 100.0 100.0 100.0 100.0	Query Query Match Length DB 100.0 67 19 100.0 67 25 100.0 69 19	DB 19 25 26 19	SUMMAKIES SUMMAKIES ID US-09-506-978-1 US-10-174-151-1 US-10-204-145-1 US-09-506-978-2	Description Sequence 1, Appli Sequence 1, Appli Sequence 2, Appli
2	391	100.0		25		Sequence 2, App
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Sequence 3, Appli Sequence 3, Appli Sequence 4, Appli Sequence 4, Appli Sequence 2, Appli Sequence 2, Appli Sequence 101, App Sequence 101, App Sequence 1175, App Sequence 1175, App Sequence 1175, App Sequence 1181, App Sequence 111, App Sequence 111, App Sequence 1116, App	e 52575, ce 1284, e 52574,
US-09-506-978-3 US-10-174-151-3 US-10-174-151-4 US-10-174-151-4 US-10-204-145-4 PCT-US99-2104-145-4 PCT-US99-2104-145-4 US-60-145-138-701 US-60-145-138-701 US-60-145-138-701 US-60-145-138-701 US-60-101-288-594 US-60-101-288-594 US-60-101-288-594 US-60-101-288-594 US-60-101-288-594 US-60-101-288-594 US-60-101-288-594 US-60-101-288-594 US-60-101-386-841-101 US-60-101-101-101-101-101-101-101-101-101-	PCT-USO1-08631-52 US-60-196-174-12 PCT-USO1-08631-52
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ALIGNMENTS

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                                                            APPLICANT: Sperifil, Francois
TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-001
CURRENT APPLICATION NUMBER: US/09/506,978
CURRENT FILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
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1 Similarity 100.0%; Pred. No. 3.1e-32;
67; Conservative 0; Mismatches 0;
                      ; Sequence 1, Application US/09506978; GENERAL INFORMATION:
                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Apis mellifera
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us-09-506-978-1
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LENGTH: 67
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      Sequence 1, Application US/10174151
GENERAL INFORMATION:
APPLICANT: Spertini, Francois
TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REPERENCE: 18519-001
CURRENT APPLICATION NUMBER: US/10/174,151
CURRENT FILING DATE: 2002-06-18
PRIOR PRIOR FILING DATE: 2000-02-18
NUMBER OF SEQ 1D NOS: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: ECOLE POLYtechnique Federale de Lausanne
APPLICANT: ESPERINI, François
TITLE OF INVENTION: NOVEL BROW POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-001-064 20349-543
CURRENT APPLICATION NUMBER: US/10/204,145
CURRENT FILING DATE: 2002-08-16
PRIOR PAPLICATION NUMBER: U.S.S.N. 09/506,978
PRIOR FILING DATE: 2000-02-18
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TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-001
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100.0%; Pred. No. 3.1e-32;
vative 0; Mismatches 0;
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Best Local Similarity 100.0
Matches 67; Conservative
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Best Local Similarity 100.0
Matches 67; Conservative
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SOFTWARE: PatentIn Ver. 2.1
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US-10-204-145-1
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US-10-174-151-1
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US-10-174-151-1
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                                                                                                                                                                                                                                  SEQ ID NO 1
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Sequence 2, Application US/10204145
GENERAL INFORMATION:
APPLICANT: Ecole Polytechnique Federale de Lausanne
APPLICANT: Scole Polytechnique Federale de Lausanne
APPLICANT: Spertini, Francois
TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REPREBRUE: 18919-001-064 20349-543
CURRENT APPLICATION NUMBER: US.10/204,145
CURRENT APPLICATION NUMBER: U.S.S.N. 09/506,978
PRIOR APPLICATION NUMBER: U.S.S.N. 09/506,978
PRIOR APPLICATION NUMBER: U.S.S.N. 09/506,978
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PATENTIN VET. 2.1
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TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-001
CURRENT APPLICATION NUMBER: US/10/174,151
CURRENT APPLICATION NUMBER: US/09/506,978
PRIOR APPLICATION NUMBER: US/09/506,978
PRIOR PILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
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CURRENT APPLICATION NUMBER: US/09/506,978
CURRENT FILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2
LENGTH: 69
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Matches 67; Conservative
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Best Local Similarity 100.0
Matches 67; Conservative
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US-10-204-145-2
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LENGTH: 69
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TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-001
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TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-01
CURRENT APPLICATION NUMBER: US/10/174,151
CURRENT FILING DATE: 2002-06-18
PRIOR PAPLICATION NUMBER: US/09/506,978
PRIOR FILING DATE: 2000-02-18
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100.0%; Pred. No. 3.2e-32;
tive 0; Mismatches 0;
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100.0%; Pred. No. 3.3e-32;
Live 0; Mismatches 0;
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CURRENT FILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/09506978 GENERAL INFORMATION:
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; GENERAL INFORMATION:
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Matches 67; Conservative
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 71
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                                                          ORGANISM: Apis mellifera
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US-09-506-978-3
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ORGANISM: Apis mellifera
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SEQ ID NO 2
LENGTH: 69
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TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REPERENCE: 18519-001-064 20349-543
CURRENT APPLICATION NUMBER: US/10/204,145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 4, Application US/09506978
GENERAL INFORMATION:
APPLICANT: Sperinin: Francois
1 TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-001
CURRENT APPLICATION NUMBER: US/09/506,978
CURRENT FILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                                                                                             APPLICANT: Ecole Polytechnique Federale de Lausanne
                                                                                                                                                                                                                                                                                                                                                         CURRENT FILING DATE: 2002-08-16
PRIOR APPLICATION NUMBER: U.S.S.N. 09/506,978
PRIOR FILING DATE: 2000-02-18
SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.1
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ORGANISM: Apis mellifera
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Best Local Similarity
                                                                                 61 VPRSKCG 67
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LENGTH: 71
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LENGTH: 73
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Ecole Polytechnique Federale de Lausanne
APPLICANT: Ecole Polytechnique Federale de Lausanne
APPLICANT: Spertini, Francois
TITLE OF INFONTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-001-064 20349-543
CURRENT APPLICATION NUMBER: US/10/204,145
CURRENT FILING DATE: 2000-02-08-16
PRIOR FILING DATE: 2000-02-18
                Sequence 4, Application US/10174151
GENERAL INFORMATION:
APPLICANT: SpertLin,
TITLE OF INVENTION: NOYEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REFERENCE: 18519-001
CURRENT APPLICATION NUMBER: US/10/174,151
CURRENT FILING DATE: 2002-06-18
PRIOR APPLICATION NUMBER: US/09/506,978
PRIOR FILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PATENTIN VEY: 2.0
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SOFTWARE: PatentIn Ver. 2.1
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SEQ ID NO 4
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US-10-174-151-4
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US-10-174-151-4
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LENGTH: 73
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Sequence 1491, Application US/60142896
GENERAL INFORMATION:
APPLICANT: Kerlavage, Anthony
TITLE OF INVENTION: ISOLATED SECRETED PROTEINS, NUCLEIC ACID
TITLE OF INVENTION: MOLECULES ENCODING SECRETED PROTEINS, AND USES THEREOF
FILE REFERENCE: CLO00052
CURRENT APPLICATION NUMBER: US/60/142,896
CURRENT FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 1594
SOFTWARE: FastEQ for Windows Version 3.0
SEQ ID NO 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: BODGAZZI, VIVIEN
TITLE OF INVENTION: ISOLATED SECRETED PROTEINS, NUCLEIC ACID
TITLE OF INVENTION: MOLECULES ENCODING SECRETED PROTEINS, AND USES THEREOF
FILE REPERENCE: CLO00062
CURRENT APPLICATION NUMBER: US/60/145,138
CURRENT FILING DATE: 1999-07-22
NUMBER OF SEQ ID NOS: 948
SOFTWARE: FASLSEQ for Windows Version 3.0
SEQ ID NO 701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 85
                                                                                                             TITLE OF INVENTION: Useful Properties of a Bee Venom Protein and Gene TITLE OF INVENTION: Useful Properties of a Bee Venom Protein and Gene FILE REFERENCE: 019049-000200PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 RCPANETFLACGPDCQTECA-TLGKPCLVRHIRCPDGCYCNKGFARNAAGTCIPLRRC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIK - ICAPGCVCRLGYLRNKKKVCVPRSKC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29.0%; Score 113.5; DB 27; Length 62; 36.2%; Pred. No. 0.0008; tive 8; Mismatches 26; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 391; DB 1; Length 92; 100.0%; Pred. No. 4.1e-32; Live 0; Mismatches 0; Indels
Sequence 2, Application PC/TUS9921077
GENRRAL INFORMATION:
APPLICANT: Cui, Xiangmin
APPLICANT: Lu, Yuefeng
APPLICANT: Pan Pacific Pharmaceutical, Inc.
                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: PCT/US99/21077 CURRENT FILING DATE: 1999-09-13 EARLIER APPLICATION NUMBER: US 60/100,172 BARLIER FILING DATE: 1998-09-14 NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 701, Application US/60145138; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 36.2
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Apis mellifera
PCT-US99-21077-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86 VPRSKCG 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 VPRSKCG 67
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US-60-145-138-701
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LENGTH: 92
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Search completed: February 26, 2003, 15:08:48 Job time: 142 secs

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266.242 Million cell updates/sec
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1 GGFGGLGGRGKCPSNEIFSR.....CRLGYLRNKKKVCVPRSKCG
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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                        OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Sequence:
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Maximum Match 100% Listing first 45 summaries

Pending_Patents_AA_New:*

1: /cgn2_6/ptodata/2/paa_VECT_NEW_COMB.pep:*

2: /cgn2_6/ptodata/2/paa_VUSO6_NEW_COMB.pep:*

3: /cgn2_6/ptodata/2/paa_VUSO8_NEW_COMB.pep:*

3: /cgn2_6/ptodata/2/paa_VUSO8_NEW_COMB.pep:*

5: /cgn2_6/ptodata/2/paa_VUSO8_NEW_COMB.pep:*

5: /cgn2_6/ptodata/2/paa_VUSO8_NEW_COMB.pep:*

6: /cgn2_6/ptodata/2/paa_VUSO8_NEW_COMB.pep:*

7: /cgn2_6/ptodata/2/paa_VUSO8_NEW_COMB.pep:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	Sequence 185, Appl Sequence 75, Appl Sequence 74, Appl Sequence 74, Appl Sequence 76, Appl Sequence 76, Appl Sequence 66993, A Sequence 189, Appl Sequence 27, Appl Sequence 27, Appl Sequence 24, Appl Sequence 24, Appl Sequence 43, Appl Sequence 43, Appl Sequence 43, Appl Sequence 41, Appl Sequence 42, Appl Sequence 117, Appl Sequence 117, Appl Sequence 155, Appl Sequence 117, Appl Sequence 117, Appl Sequence 117, Appl Sequence 117, Appl Sequence 117, Appl Sequence 155, Appl Sequence 117, Appl Sequence 155, Appl Sequence 117, Appl Sequence 155, Appl Sequence 155, Appl Sequence 155, Appl Sequence 155, Appl Sequence 156, Appl Sequence 156, Appl
SUMMARIES	US-10-038-854-185 US-10-028-248A-75 US-10-028-248A-74 US-10-028-248A-74 US-10-028-248A-74 US-10-028-248A-76 US-10-028-248A-76 US-10-028-248A-76 US-09-724-676-66993 US-09-724-676-66993 US-09-724-676-66993 US-09-724-676-66993 US-09-724-676-66993 US-10-028-248A-43 US-10-028-248A-43 US-10-028-248A-43 US-10-028-248A-42 US-10-028-248A-42 US-10-028-248A-42 US-10-028-248A-42 US-10-028-248A-42 US-10-028-248A-43 US-10-028-248A-43 US-10-028-248A-43 US-10-028-248A-43 US-10-028-248A-43 US-10-028-248A-43 US-10-028-248A-43 US-10-078-248A-43 US-10-078-248A-43 US-10-078-348A-43 US-
. DB	
Length	67 5374 5374 5376 5376 5376 5376 5376 64360 4360 4360 4211 11458 11458 11458 11568 855 855 855
% Query Match	288.9 288.9 288.9 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20
Score	1113 1113 1113 1113 1109 100 100 97 97 97 98 81 81 81 81 81 81 81 81 81 81 81 81 81
Result No.	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

Sequence	JS-IU-U1/-IDI-1340 Seguence 1346, A	JS-10-052-648A-34 Sequence 34, Apr	JS-10-052-648A-35 Sequence 35, Appl	214	103	JS-09-751-708A-120 Sequence 120, App	Sequence 18, A	170 Sequence	1 Sequence 21,	212 Sequence 212,	Sequence 11,	414	354	13 Sequence 213,	1 Sequence 21, P	Seguence 46,		44 Sequence 44,	
US-10-07	TO-01-50	US-10-053	US-10-05	US-10-05	36-60-Sn	US-09-75	US-09-949-001-18	US-10-27	US-09-949-001-2	US-10-055-877-	US-10-228-206-11	US-09-94	US-09-949-002-	US-10-055-877-2	US-10-312-352-2	US-10-055-877-46	US-10-055-877-52	US-10-055-877-	
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18.8	7.01	18.7	18.7	18.7	18.4	18.4	18.4	18.4	18.4	18.4	18.2	18.2	18.2	18.2	17.9	17.9	17.9	17.9	
73.5) (73	73	73	72	72	72	72	72	72	71	7.1	71	7.1	70	7.0	70	20	
77	0 0	53	30	31	32	33	34	32	36	37	38	30	40	41	42	43	44	45	

ALIGNMENTS

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APPLICANT: MacDougall, John R
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-230
CURRENT APPLICATION NUMBER: US/10/038,854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2001-01-02
PRIOR PELING DATE: 2001-01-02
PRIOR PELING DATE: 2001-01-04
PRIOR PELING DATE: 2001-02-04
PRIOR FILING DATE: 2001-02-20
PRIOR FILING DATE: 2001-02-20
PRIOR PELING DATE: 2001-03-29
PRIOR PILING DATE: 2001-03-29
PRIOR APPLICATION NUMBER: 60/279,832
PRIOR PILING DATE: 2001-03-29
                   Sequence 185, Application US/10038854 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 2001-03-29
APPLICATION NUMBER: 60/279,833
FILING DATE: 2001-03-29
APPLICATION NUMBER: 60/279,863
FILING DATE: 2001-03-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT FILING DATE: 2003-01-22
PRIOR APPLICATION UNMBER: 60/258,928
PRIOR FILING DATE: 2000-12-29
PRIOR APPLICATION NUMBER: 60/259,415
                                                                                         Wolenc, Adam R
Vernet, Corine
Eisen, Andrew J
Liu, Xiaohong
Malyankar, Uriel M
Shimkets, Richard A
                                                                                                                                                                                                                                                                                                                                                           Shenoy, Suresh G
Rastelli, Luca
Casman, Stacie J
Boldog, Ferenc
Burgess, Catherine E
Edinger, Shlomit R
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Gorman, Linda
Kekuda, Ramesh
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Gusev, Vladimir Y
Gangolli, Esha A
Guo, Xiaojia S
Shenoy, Suresh G
                                                       APPLICANT: Spytek, Kimberly A
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Smithson, Glennda
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US-10-038-854-185
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APPLICANT:
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APPLICANT: APPLICANT:
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TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides and Methods of Use
TITLE OF INVENTION: Thereof
                                                                                                                                                                                                                                                                                                                                                                                       12 CPSNEIFSRCDGRCQRFCPN-----VVP-----KPLCIKICAPGCVCRLGYLRNKK-KV 59
                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/283,889
PRIOR FILING DATE: 2001-04-13
PRIOR RAPLICATION NUMBER: 60/284,447
PRIOR FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-25
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ. ID NOS: 41.
SEQ. ID NO 185
FEMALE: PAGENTIN VET. 2.1
                                                                                                                                                                                                                                                                                                         30.4%; Score 119; DB 6; Length 67; 37.3%; Pred. No. 1.3e-05;
                                                                                                                                                                                                                                                                                                                                                 23; Indels
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CURRENT APPLICATION NUMBER: US/10/028,248A
CURRENT FILING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: 60/256619
PRIOR FILING DATE: 2000-12-19
PRIOR FILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: 60/272408
PRIOR FILING DATE: 2001-01-19
PRIOR PRILING DATE: 2001-04-20
PRIOR PRILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-07-26
                                                                                                                                                                                                                                                                                                                                                 7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 75, Application US/10028248A GENERAL INFORMATION: APPLICANT: Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Taupier Jr, Raymond J
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Shenoy, Suresh
Spytek, Kimberly
Gangolli, Esha
Miller, Charles
Boldog, Ferenc
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Zerhusen, Bryan
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Vernet, Corine
Casman, Stacie
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Edinger, Shlomit
Stone, David
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Millet, Isabelle
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Best Local Similarity 37.38
Matches 25; Conservative
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Colman, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ramesh
                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-038-854-185
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| CVPRSEC 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .60 CVPRSKC 66
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US-10-028-248A-75
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APPLICANT: Zerhusen, Brian TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES AND METHODS OF USE THEREO FILE REFERENCE: 21402-222CIP CURRENT APPLICATION NUMBER: US/10/107,782
                                                                                                                                                                                                                            'n
                                                                                                                                                                                                                                                                                              22; Indels 10; Gaps
                                                                                                                                                                                                                                                                      11 KCPSNEIFSRCDGRCQRFCPNVVPKPLC-----IKICAPGCVCRLGYLRNKKKVCVPR 63
                                                                                                                                                                      Score 113; DB 6; Length 5374;
Pred. No. 0.0014;
                                                                                                                                                                                                                            8; Mismatches
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PRIOR APPLICATION NUMBER: 10/028,248
PRIOR PILING DATE: 2001-12-19
PRIOR PILING DATE: 2000-12-19
PRIOR PILING DATE: 2000-12-19
PRIOR FILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-02-19
PRIOR FILING DATE: 2001-02-19
PRIOR PLING DATE: 2001-02-19
PRIOR APPLICATION NUMBER: 60/262,959
PRIOR APPLICATION NUMBER: 60/205,189
PRIOR PILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-07-26
PRIOR PILING DATE: 2001-07-26
PRIOR APPLICATION NUMBER: 60/311,266
PRIOR PILING DATE: 2001-08-09
PRIOR PILING DATE: 2001-08-09
PRIOR FILING DATE: 2001-08-09
PRIOR FILING DATE: 2001-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 75, Application US/10107782 ; GENERAL INFORMATION:
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Taupier, Raymond, jr.,
Tchernev, Velizar,
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SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 75
LENCTH: 5374
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Si, Jingsheng,
Smithson, Glennda,
Spytek, Kimberly,
                                                                                                                                                                           Query Match 28.9%;
Best Local Similarity 37.5%;
Matches 24; Conservative (
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Rothenberg, Mark,
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Gangolli, Esha,
Kekuda, Ramesh,
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Malyankar, Uriel,
Miller, Charles,
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NUMBER OF SEQ ID NOS: 211
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Casman, Stacie
Colman, Steve,
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                                                                                          TYPE: PRT
ORGANISM: Mus musculus
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                                            SEQ ID NO 75
LENGTH: 5374
                                                                                                                                    US-10-028-248A-75
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APPLICANT: Zerhusen, Brian
TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES AND METHODS OF USE THEREOFILE REFERENCE: 21402-222CIP
                                                          Db 4743 KCPANSLYTHCLPTCLPSCSN--PDGRCEGTSHKAPSTCREGCVCQPGYLLN-KDTCVHK 4799
                                11 KCPSNEIFSRCDGRCQRFCPNVVPKPLC-----IKICAPGCVCRLGYLRNKKKVCVPR 63
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Pred. No. 0.0014;
8; Mismatches 22; Indels 10
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CURRENT FILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: US/20/10/10/208.248
PRIOR APPLICATION NUMBER: US/20/208.248
PRIOR FILING DATE: 2001-12-19
PRIOR FILING DATE: 2000-12-19
PRIOR FILING DATE: 2000-12-19
PRIOR FILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-02-28
PRIOR APPLICATION NUMBER: 60/208,189
PRIOR PLING DATE: 2001-04-20
PRIOR PLING DATE: 2001-04-20
PRIOR FILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-04-20
PRIOR PLING DATE: 2001-04-20
PRIOR PLING DATE: 2001-04-20
PRIOR PLING DATE: 2001-04-09
PRIOR PILING DATE: 2001-03-28
PRIOR FILING DATE: 2001-03-28
PRIOR FILING DATE: 2001-03-28
NUMBER OF SEQ ID NOS: 215
                                                                                                                                                                                                                                                          ; Sequence 74, Application US/10107782; GENERAL INFORMATION:
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Tchernev, Velizar,
Vernet, Corine,
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Shimkets, Richard,
Si, Jingsheng,
Smithson, Glennda,
Spytek, Kimberly,
Stone, David,
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Rothenberg, Mark,
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Malyankar, Uriel,
Miller, Charles,
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Gangolli, Esha,
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Colman, Steve,
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Best Local Similarity
                                                                                                                                                         4800 NQCG 4803
                                                                                                                  64 SKCG 67
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APPLICANT:
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APPLICANT:
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TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides and Methods of Use
TITLE OF INVENTION: Thereof
                                                                                                                                                                                           22; Indels 10; Gaps
                                                                                                                                                               11 KCPSNEIFSRCDGRCQRFCPNVVPKPLC-----IKICAPGCVCRLGYLRNKKKVCVPR 63
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                                                                               Query Match 28.9%; Score 113; DB 6; Length 5374; Best Local Similarity 37.5%; Pred. No. 0.0014; Matches 24; Conservative 8; Mismatches 22; Indels 1(
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CURRENT APPLICATION NUMBER: US/10/028,248A
CURRENT FILING DATE: 2001-12-19
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PRIOR APPLICATION NUMBER: 60/256619
PRIOR FILING DATE: 2000-12-19
PRIOR FILING DATE: 2000-12-19
PRIOR APPLICATION NUMBER: 60/26295
PRIOR APPLICATION NUMBER: 60/26295
PRIOR PELING DATE: 2001-01-19
PRIOR FILING DATE: 2001-02-28
PRIOR FILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-08-09
NUMBER OF SEQ ID NOS: 211
SOFTWARE: PATENTIN NUMBER: 60/311266
NUMBER OF SEQ ID NOS: 211
SEQ ID NO 74
                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 74, Application US/10028248A
; GENERAL INFORMATION:
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Cekuda, Ramesh
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Vernet, Corine
Casman, Stacie
Malyankar, Uriel
Shenoy, Suresh
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Si, Jingsheng
Edinger, Shlomit
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Millet, Isabelle
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Miller, Charles
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                     ; ORGANISM: Homo sapiens US-10-107-782-75
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Best Local Similarity
Trhes 24; Conserva
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TYPE: PRT
                                                                                    Query Match
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APPLICANT: Zerbusen, Brian
TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES AND METHODS OF USE THEREO
FILE REFRENCE: 21402-222CIP
CURRENT APPLICATION NUMBER: US/10/107,782
CURRENT FILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: 10/028,248
PRIOR APPLICATION NUMBER: 60/256,619
PRIOR APPLICATION NUMBER: 60/256,619
PRIOR APPLICATION NUMBER: 60/256,959
PRIOR APPLICATION NUMBER: 60/22,959
PRIOR APPLICATION NUMBER: 60/22,959
PRIOR PILING DATE: 2001-01-19
PRIOR PILING DATE: 2001-02-28
PRIOR PILING DATE: 2001-04-20
PRIOR FILING DATE: 2001-07-26
PRIOR FILING DATE: 2001-03-28
NUMBER OF SEQ ID NOS: 215
PRIOR FILING DATE: 2001-03-28
NUMBER OF SEQ ID NOS: 215
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; Sequence 66993, Application US/09724676
; GENERAL INFORMATION:
; APPLICANT: Compugen LTD
                   Sequence 76, Application US/10107782 GENERAL INFORMATION: APPLICANT: Boldog, Ferenc,
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Tchernev, Velizar,
Vernet, Corine,
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Si, Jingsheng,
Smithson, Glennda,
Spytek, Kimberly,
Stone, David,
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Malyankar, Uriel,
Miller, Charles,
Millet, Isabelle,
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Rothenberg, Mark,
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Gangolli, Esha,
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Matches 24; Conservative
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                                                                                         Casman, Stacie
Colman, Steve,
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ORGANISM: Homo sapiens
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US-10-107-782-76
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APPLICANT: Millet, Isabelle
APPLICANT: Millet, Isabelle
APPLICANT: Millet, Isabelle
TITLE OF INVENTION: NOVE1 Mucleic Acids and Polypeptides and Methods of Use
TITLE OF INVENTION: Thereof
TITLE OF INVENTION: Thereof
FILE REFERENCE: 21402-222
GORRENT APPLICATION NUMBER: US/10/028,248A
CURRENT FILING DATE: 2001-12-19
PRIOR APPLICATION NUMBER: 60/256619
PRIOR APPLICATION NUMBER: 60/26599
PRIOR PILING DATE: 2001-01-19
PRIOR FILING DATE: 2001-01-28
PRIOR FILING DATE: 2001-02-28
PRIOR FILING DATE: 2001-04-20
PRIOR PLING DATE: 2001-04-20
PRIOR PLING DATE: 2001-04-20
PRIOR PLING DATE: 2001-07-26
PRIOR APPLICATION NUMBER: 60/308039
PRIOR PLING DATE: 2001-07-26
PRIOR FILING DATE: 2001-08-09
NUMBER OF SEQ ID NOS: 211
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35.3%; Pred. No. 0.0021;
tive 11; Mismatches 13; Indels 20
                                                                                                                                                                                   Sequence 76, Application US/10028248A GENERAL INFORMATION:
APPLICANT: Shimkets, Richard
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Si, Jingsheng
Edinger, Shlomit
Stone, David
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Vernet, Corine
Casman, Stacie
Malyankar, Uriel
Shenoy, Suresh
Spytek, Kimberly
Gangolli, Esha
Miller, Charles
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Zerhusen, Bryan
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Best Local Similarity
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4800 NQCG 4803
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                          64 SKCG 67
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APPLICANT:
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APPLICANT: Watson, Susan R.
APPLICANT: Aziz, Natasha
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Anglogenesis, Compositions and
TITLE OF INVENTION: Methods of Screening for Anglogenesis Modulators
FILE REFERENCE: 018501-006200PC
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                                                                                                                                                                                                                                                                                                  DB 5; Length 4360;
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                                                                                                                                                                                                                                                                                                                                               Indels
TITLE OF INVENTION: Variants of alternative splicing FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION WNBER: US/09/724,676 CURRENT FILING DATE: 2000-11-28 NUMBER OF SEQ ID NOS: 97222 SOFTWARE: Patentin version 3.2 LENGTH: 4360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 66993, Application US/09724676A
GENERAL INFORMATION:
APPLICANT: Compugen. TD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                             Score 106.5; DB 5;
Pred. No. 0.0057;
6; Mismatches 29;
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PRIOR FILING DATE: 2001-02-14
PRIOR PELICATION NUMBER: US 09/791,390
PRIOR FILING DATE: 2001-02-22
PRIOR FILING DATE: 2002-04-19
PRIOR FILING DATE: 2002-04-19
PRIOR FILING DATE: 2002-04-19
PRIOR FILING DATE: 2001-08-03
PRIOR PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR PRIOR DATE: 2001-11-13
PRIOR PRIOR DATE: 2001-11-29
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CURRENT FILING DATE: 2002-02-14
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36.8%;
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Best Local Similarity 36.8%
Matches 21; Conservative
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                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens
US-09-724-676-66993
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Best Local Similarity
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US-09-724-676A-66993
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APPLICANT: Sun, Yongming
APPLICANT: Liu, Chenghua
TITLE OF INVENTION: COMPOSITIONS AND METHODS RELATING TO PANCREATIC SPECIFIC GENES
TITLE OF INVENTION: PROTEINS
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CURRENT APPLICATION NUMBER: PCT/US02/40655
CURRENT FILING DATE: 2002-12-19
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PRIOR FILING DATE: 2001-12-21
NUMBER OF SEQ ID NOS: 543
SOFTWARE: PatentIn version 3.1
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; GENERAL INFORMATION:
; APPLICANT: diaDexus, Inc.
NUMBER OF SEQ ID NOS: 230
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 149
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ORGANISM: Homo sapiens
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22; Indels 18; Gaps
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PRIOR APPLICATION NUMBER: 60/286,096
PRIOR FILING DATE: 2001-04-21
PRIOR PILING DATE: 2001-04-21
PRIOR PAPLICATION NUMBER: 60/299,695
PRIOR FILING DATE: 2001-06-20
PRIOR FILING DATE: 2001-08-29
PRIOR FILING DATE: 2001-08-29
PRIOR FILING DATE: 2001-02-28
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 653
SOFTWARE: PALENTIN Ver. 2.1
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GENERAL INFORMATION:
APPLICANT: Birse et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PAISING
CURRENT APPLICATION NUMBER: US/10/264,237
CURRENT APPLICATION NUMBER: DC2-10-04

PRIOR FILING DATE: 2001-05-18

PRIOR FILING DATE: 2001-05-18

PRIOR FILING DATE: 2000-05-19

NUMBER OF SEQ ID NOS: 2876

SOFTWARE: PALENTIN VEF. 3.1
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GENERAL INFORMATION:
APPLICANT: WEIGEL, PAUL H.
APPLICANT: WEIGEL, JANET A.
TITLE OF INVENTION: METHODS OF USING A HYALURONAN RECEPTOR
FILE REFERENCE: 619758-8/JP/286,468
CURRENT APPLICATION NUMBER: PCT/US02/13209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens
US-10-264-237-2725
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GENERAL INFORMATION:

APPLICANT: WEIGEL, PAUL H.

APPLICANT: WEIGEL, JANET A.

TITLE OF INVENTION: METHODS OF USING A HYALURONAN RECEPTOR

FILE REPERENCE: 619758-8/JP/286,468

CURRENT APPLICATION NUMBER: PCT/US02/13209

CURRENT FILING DATE: 2002-04-25

PRIOR PELLING DATE: 2001-04-25

PRIOR PELLING DATE: 2001-04-25

PRIOR PELLING DATE: 2001-04-25

WHINE APPLICATION NUMBER: 09/842,930

PRIOR FILING DATE: 2001-04-25

WHINE APPLICATION NUMBER: 09/842,930

PRIOR FILING DATE: 2001-04-25

WUMBER OF SEQ ID NOS: 25

SOFTWARE: Patentin Ver. 2.1
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                  PRIOR APPLICATION NUMBER: 60/286,468 PRIOR FILING DATE: 2001-04-25 PRIOR APPLICATION NUMBER: 09/842,930 PRIOR FILING DATE: 2001-04-25
CURRENT FILING DATE: 2002-04-25
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Best Local Similarity 31.99
Matches 23; Conservative
                                                                                                                          NUMBER OF SEQ ID NOS: 25
SOFTWARE: Patentin Ver. 2.1
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ORGANISM: Homo sapiens
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PCT-US02-13209-25
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LENGTH: 1460
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IYPE: PRT
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128, A
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65.711 Million cell updates/sec
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Sequence 7, 8
Sequence 9, 8
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Sequence
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1 GGFGGLGGRGKCPSNEIFSR.....CRLGYLRNKKKVCVPRSKCG
                                                                                                                                                       February 26, 2003, 15:03:23; Search time 30 Seconds
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
                           Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-394-630-2
US-08-718-967-2
US-08-718-388-7
US-08-718-388-9
US-08-465-390-59
US-08-466-397-59
US-08-461-59
US-09-249-471-59
US-09-249-471-59
US-09-249-471-59
US-09-249-471-59
US-09-249-471-128
US-09-249-461-59
US-09-249-461-59
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US-09-249-461-59
US-09-249-461-59
US-09-249-461-128
US-08-486-399-128
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US-08-486-397-128
US-08-486-397-128
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US-08-46-397-128
US-08-46-397-128
US-08-249-471-128
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GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compug
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Listing first 45 summaries
                                                                                                        - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 85
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25,
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US-08-276-967-2
is Sequence 2, Application US/08276967
is Patent No. S851817
is GENERAL INFORMATION:
APPLICANT: Hardy, Daniel M.
TITLE OF INVENTION: Species-Specific Egg-Binding Proteins of TITLE OF INVENTION: Sperm
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P. O. Box 4433
CITY: Houston
                  Sedineuroe 
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US-09-249-448-128
US-09-219-983A-4
US-08-465-380-25
US-08-466-380-49
US-08-486-397-25
US-08-486-397-49
US-08-486-399-25
US-08-46-965-49
US-08-46-965-49
US-08-46-100-54
US-08-34-641-25
US-08-634-641-25
US-08-249-471-25
US-08-249-471-25
US-08-249-471-25
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US-08-249-471-25
US-09-249-471-25
US-09-249-471-25
US-09-249-471-25
US-09-249-471-25
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/09394630
Patent No. 6395306
GENERAL INFORMATION
APPLICANT: Cui, Xiangmin
APPLICANT: Lu, Yuefeng
APPLICANT: Pan Pacific Pharmaceutical, Inc
TITLE OF INVENTION: Useful Properties of al
                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Encoding Same FILE REFERENCE: 019049-000200US CURRENT APPLICATION NUMBER: US/09/394,630 CURRENT FILING DATE: 1999-09-13 PRIOR APPLICATION NUMBER: US 60/100,172 PRIOR FILING DATE: 1998-09-14
   NUMBER OF SEQ ID NOS: 22
SOFWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 92
 ; ORGANISM: Apis mellifera
US-09-394-630-2
 61 VPRSKCG 67
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 TYPE: PRT
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US-08-718-388-9
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Patent No. 6271362
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: HARADA, MINORU
APPLICANT: HARADA, NAOKI
TITLE OF INVENTION: GENE ENCODING IGG FC REGION-BINDING
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA.
APPLICATION NUMBER: US/08/276,967
FILING DATE: SUDmitted Herewith
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PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: BIRCH, STEWART, KOLASCH AND BIRCH
STREET: PO BOX 747
CITY: FALLS CHURCH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 107.5; DB;
Pred. No. 0.0038;
9; Mismatches 18
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NAME: MURPHY JR, GERALD M
REGISTRATION NUMBER: 28,977
REFERENCE/DGOKET NUMBER: 0230-111
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/718,388
                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                            CLASSIFICATION: 530
ATORNEY/AGENT INFORMATION:
NAME: KILCCHell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: UTSD
TELECOMMUNICATION INFORMATION:
TELEPHONE: 713-787-1400
TELEPHONE: 713-789-2679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                      TELERAX: 713-789-2679
TELEX: 79-0924
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 2476 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 27.5%;
Best Local Similarity 33.3%;
Matches 22; Conservative 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 536
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OPERATING SYSTEM:
SOFTWARE: PatentI
                                     77210-4433
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ZIP: 22040-0747
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1507 PLSQCG 1512
Texas
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                                                                                                                                                                                                                                                                                                                                                                                               Sequence 9, Application US/08718388
Patent No. 6271362
GENERAL INFORMATION:
APPLICANT: MARADA, MAOKI
TITLE OF INVENTION: GENE ENCODING IGG FC REGION-BINDING
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSEE: BIRCH, STEWART, KOLASCH AND BIRCH
STREET: PO BOX 747
                                                                                                                                                                           Score 106.5; DB 4;
Pred. No. 0.005;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/718,388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 106.5; DB 4;
Pred. No. 0.0099;
6; Mismatches 29;
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OPERATING SYSTEM: PC-DOS/MS-DOS
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; Patent No. 5863894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 02
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28,977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 536
ATTORNEY/AGENT INPORMATION:
NAME: WURPHY JR, GERALD M
REGISTRATION NUMBER: 28,97
TELEPHONE: (703) 205-8000
TELEFAX: (703) 205-8650
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                        27.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27.2%;
36.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                             2594 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 5,1.2.
Best Local Similarity 36.8%
Matches 21, Conservative
                                                                                                                                                                                                              Best Local Similarity 36.8
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS
                                                                                                                                   , MOLECULE TYPE: protein US-08-718-388-7
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                                                                                               amino acid
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24; Indels 16; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 25.6%; Score 100; DB 2; Length 84; Best Local Similarity 30.4%; Pred. No. 0.00097; Matches 21; Conservative 8; Mismatches 24; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: NEMATODE-EXTRACTED ANTICOAGULANT TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: George P. Vlasuk, Patric H. Stanssens, APPLICANT: Joris H.L. Mensens, Marc J. Lauwereys, APPLICANT: Yves R. Laroche, Laurent S. Jespers, APPLICANT: Yannick G.J. Gansemans, Matthew Moyle, APPLICANT: Peter W. Bergum
                                                                                                                                                                                                                                             MEDIUM TYPE: 3.5" Diskette, 1.44 Mb MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/O8/486,397
FILING DATE: June 5, 1995
CLASSIETCATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTORNEY/AGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,158
REFERENCE/DOCKET NUMBER: 213/269
                                                                                                                                                                                                                                                                                          COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Ancyclostoma caninum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 59, Application US/08486399; Patent No. 5866543; GENERAL INFORMATION:
NUMBER OF SEQUENCES: 357
CORRESPONDENCE ADDRESS:
ADDRESSE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHOR: (213) 489-1600
TELERA: (213) 95-0440
TELEX: 67-3510 NO: 59:
INFORMATION FOR SEQ ID NO: 59:
EQUIENCE CHARACTERISTICS:
LENGTH: 84 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: Lyon & Lyon
633 West Fifth Street
Suite 4700
                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Word Perfect CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 3 CORRESPONDENCE ADDRESS:
                                                                                                                      CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             amino acid
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                                                                                                                                                                        U.S.A.
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                                                                                                                                                                                             ZIP: 90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-486-397-59
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                                                                                                                                                                      COUNTRY:
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                                                                                                  STREET:
CITY: LA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25.6%; Score 100; DB 2; Length 84; 30.4%; Pred. No. 0.00097; tive 8; Mismatches 24; Indels
                 APPLICANT: George P. Vlasuk, Patric H. Stanssens,
APPLICANT: JOTIS H.L. Mensens, Marc J. Lauwereys,
APPLICANT: Yves R. Laroche, Laurent S. Jespers,
APPLICANT: Yeels W. Laroche, Laurent S. Jespers,
APPLICANT: Peter W. Bergum
TITLE OF INVENTION: NEMATODE-EXTRACTED ANTICOAGULANT
TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 59, Application US/08486397
Patent No. 586542
GENERAL INFORMATION:
APPLICANT: George P. Vlasuk, Patric H. Stanssens,
APPLICANT: Joris H.L. Mensens, Marc J. Lauwereys,
APPLICANT: Yves R. Laroche, Laurent S. Jespers,
APPLICANT: Year M. Bergum
APPLICANT: Peter W. Bergum
TITLE OF INVENTION: NEWATODE-EXTRACTED ANTICOAGULANT
TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                      COMPOUTER READBLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
COMPUTER: WATCHING FOR 5.0
SOFTWARE: WORD PETECT 5.1
CURREMY APPLICATION DATA:
APPLICATION NUMBER: US/08/465,380
FILING DATE: June 5, 1995
CLASSIFICATION 530
PRIOR APPLICATION 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/226,110
FILING DATE: OCTOBER 18, 1994
ATTORNEY/AGENT INFORMATION:
RACHISTRATION NUMBER: 30,158
RECERRENTENDE/CONCATENDERS: 213/268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: Ancyclostoma caninum
                                                                                                                                                                                                                                          ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 59:
SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21; Conservative
                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                 CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                  90071
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-465-380-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-486-397-59
                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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COUNTRY:
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30.4%; Pred. No. 0.00097;
tive 8; Mismatches 24; Indels 16; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11 KCPSNEIFSRCDGR-CQRFC-------PNVVPKPLCIKICAPGCVCRLGYLRNKK 57
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Patent No. 587208

GENERAL INFORMATION:

APPLICANT: George P. Vlasuk, Patric H. Stanssens,

APPLICANT: Toris H.L. Mensens, Marc J. Lauwereys,

APPLICANT: Yous R. Laroche, Laurent S. Jespers,

APPLICANT: Yanick G.J. Gansemans, Matthew Moyle,

APPLICANT: Pannick G.J. Gansemans, Matthew Moyle,

TILLE OF INVENTION: NEMATODE-EXTRACTED ANTICOAGULANT

TITLE OF INVENTION: PROTEIN

NUMBER OF SEQUENCES: 356

CORRESPONDENCE ADDRESS:
                                            MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,399
FILING DATE: June 5, 1995
CLASSIFTCATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTONEY, FAGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
RECISTRATION NUMBER: 30,158
REFERENCE/DOCKET NUMBER: 213/270
TELECHONE: (213) 489-1600
TELEPHONE: (213) 955-0440
TELEPHONE: 67-3510
INFORMATION FOR SEQ ID NO: 59:
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: Storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM COMPALIBLE
A OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ancyclostoma caninum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 25.6%
Best Local Similarity 30.4%
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM:
US-08-486-399-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-461-965-59
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24; Indels 16; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 25.6%; Score 100; DB 2; Length 84; Best Local Similarity 30.4%; Pred. No. 0.00097; Matches 21; Conservative 8; Mismatches 24; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Stanssens, Patrick Eric Hugo
APPLICANT: Stanssens, Patrick Eric Hugo
APPLICANT: Stanssens, Patrick Eric Hugo
APPLICANT: Hawereys, Marc Josef
APPLICANT: Lauwereys, Marc Josef
APPLICANT: Lauwereys, Marc Josef
APPLICANT: Jespers, Laurent Stephane
APPLICANT: Gansemans, Yannick Georges Jozef
APPLICANT: Bergum, Peter W.
TITLE OF INVENTION: NEMATCHEN
ITILE OF INVENTION: NEMATCHEN
NUMBER OF SEQUENCES: 356
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: PCT/US95/13231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/634,641
FILING DATE: April 19, 1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,965
                                    CLASSIFICATION: 530
PRIOR APPLICATION DATA:
PPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTONNEY/AGBERT INFORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,158
                                                                                                                                                                                                                                                                                                                                                                                                 ; TUPOLOGY: linear; MOLECULE TYPE: peptide; ORIGINAL SOURCE: CRGANISM: Ancyclostoma caninum US-08-461-965-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 59, Application US/08634641; Patent No. 5955294
                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 210/2

TELECOMMUNICATION INCPRMATION:
TELEPHONE: (213) 489-1600
TELERX: 67-3510
INFORMATION FOR SEQ ID NO: 59:
SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C.
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
                      June 5, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Los Angeles
California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ...i: U.S.A.
90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   58 KVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 DKCVSAEDC 70
                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 9
US-08-634-641-59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 KCPSNEIFSRCDGR-CQRFC------PNVVPKPLCIKICAPGCVCRLGYLRNKK 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Vlasuk, George Phillip
APPLICANT: Stanssens, Patrick Eric Hugo
APPLICANT: Messens, Joris Hilda Lieven
APPLICANT: Laroche, Yves Rene
APPLICANT: Laroche, Yves Rene
APPLICANT: Jespers, Laurent Stephane
APPLICANT: Jespers, Laurent Stephane
APPLICANT: Bergum, Peter W.
APPLICANT: Bergum, Peter W.
APPLICANT: Moyle, Matthew
APPLICANT: Moyle, Matthew
APPLICANT: Moyle, Matthew
APPLICANT: Moyle, Matthew
APPLICANT: Bergum, Peter W.
ATTLE OF INVENTION: INHIBITORS AND ANTICOAGULANT
MINMERD OF CONTINENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 100; DB 2; Length 84;
Pred. No. 0.00097;
8; Mismatches 24; Indels
           APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/486,397
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: OCTOBER: 1994
ATORNEY/AGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 219/136
TELECHOME: (213) 955-0440
TELECHOME: (213) 955-0440
TELEFAX: (213) 955-0440
TELEFAX: 67-3510
INFORMATION FOR SEQ ID NO: 59:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM Compatible OPERATING SYSTEM: IBM P.C. DOS 5.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Ancyclostoma caninum
US-08-634-641-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 59, Application US/09249471 Patent No. 6040441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 356
CORRESPONDENCE ADDRESS:
ADDRESSE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
October 17, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 25.6%;
Best Local Similarity 30.4%;
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 84 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: California
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US-09-249-471-59
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11 KCPSNEIFSRCDGR-CQRFC-------PNVVPKPLCIKICAPGCVCRLGYLRNKK 57
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Pred. No. 0.00097;
8; Mismatches 24; Indels
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TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE
TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stanssens, Patrick Eric Hugo
Messens, Joris Hilda Lieven
Lauwereys, Marc Josef
Laroche, Yves Rene
Jespers, Laurent Stephane
Gansemans, Yannick Georges Jozef
Moyle, Matthew
                                                                                                  APPLICATION DATA

PARTICATION NUMBER: 08/809,455
FILING DATE: April 17, 1997
APPLICATION NUMBER: PCT/US95/13231
FILING DATE: OCTOBER: 7, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: OCTOBER 18, 1994
ATTORNEY/AGENT INFORMATION:
NAMME: BIGGS, SUZANNE L.
NAMME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,156,720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 216/270
TELECOMMUNICATION INFORMATION: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 59:
SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
                                        APPLICATION NUMBER: US/09/249,471 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vlasuk, George Phillip
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GENERAL INFOWMATION:
GENERAL TAYONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Ancyclostoma caninum
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633 West Fifth Street
Suite 4700
SOFTWARE: Word Perfect 5.1 CURRENT APPLICATION DATA:
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                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
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Best Local Similarity
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US-09-249-472-59
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APPLICANT:
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APPLICANT:
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APPLICANT:
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11 KCPSNEIFSRCDGR-CQRFC-------PNVVPKPLCIKICAPGCVCRLGYLRNKK 57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24; Indels
TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
US-08-809-455-59
; Sequence 59, Application US/08809455
; Patent No. 6090916
; GENERAL INFORMATION:
; APPLICANT: Vlasuk, George Phillip
; APPLICANT: Stanssens, Patrick Eric Hugo
                                                                                                                                                                                                                                                                            MEDIUM TYPE: 3.5" Diskette, 1.44 Mb MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: World Perfect 5.1
CURRENY APPLICATION DATA:
APPLICATION NUMBER: US/09/249,451
                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/809,455
FILING DATE: APTIL 17, 1997
APPLICATION NUMBER: PCT/US95/13231
AFLING DATE: October 17, 1995
APPLICATION NUMBER: 08/486,399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/466,397
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
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; ORIGINAL SOURCE:
; ORGANISM: Ancyclostoma caninum
US-09-249-451-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: October 18, 1994
ATTORNEY/AGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
                                                                                       ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30,158
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3310
INFORMATION FOR SEQ ID NO: 59:
                                             356
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Best Local Similarity 30.44
Matches 21; Conservative
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                                          NUMBER OF SEQUENCES: 3: CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER:
                                                                                                                                                          CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
GY: linear
                                                                                                                                                                                                         U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                          90071
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                                                                                                                                                                                                         COUNTRY:
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30.4%; Pred. No. 0.00097;
tive 8; Mismatches 24; Indels 16; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 KCPSNEIFSRCDGR-CQRFC------PNVVPKPLCIKICAPGCVCRLGYLRNKK 57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vlasuk, George Phillip
Stanssens, Patrick Eric Hugo
Messens, Joris Hilda Lieven
                                                                                                                             COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/249,472
FILING DATE: WAPIL 17, 1997
APPLICATION NUMBER: PCT/US95,1321
FILING DATE: October 17, 1995
APPLICATION NUMBER: PCT/US95,1321
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/486,397
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTORNEY/AGENT INRORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 216/270
TELECOMMULTATION INFORMATION:
TELECOMMULTATION INFORMATION:
                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ancyclostoma caninum
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 59:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Bergum, Peter W. TITLE OF INVENTION: NEMATOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 30.4%
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide ORIGINAL SOURCE:
California
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TOPOLOGY:
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APPLICANT:
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                       COUNTRY:
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APPLICANT: Moyle, matthew
APPLICANT: Moyle, matthew
TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE
TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT
TITLE OF INVENTION: 10HIBITORS AND ANTICOAGULANT
TITLE OF INVENTION: 356
                                                                                                                                                                                     APPLICANT: Lauwereys, ...... APPLICANT: Laroche, Yves Rene APPLICANT: Laroche, Yves Rene APPLICANT: Gasemans, Yannick Georges Jozef APPLICANT: Moyle, Matthew Deter W. ....... PRESENTED APPLICANT: Open APPLICANT: Deter W.
                                                                                                                     APPLICANT: Vlasuk, George Phillip
APPLICANT: Stanssens, Patrick Eric Hugo
APPLICANT: Messens, Joris Hilda Lieven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIJING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/6809,455
FILING DATE: APRIL 17, 1997
APPLICATION NUMBER: 07/US95/13231
FILING DATE: October 17, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/466,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPOTER: IBM COMPATIBLE
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/249,461
                                                ; Sequence 59, Application US/09249461
; Patent No. 6096877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Ancyclostoma caninum US-09-249-461-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/326,11.
FILING DATE: October 18, 1994
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELERAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 59:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: BIGGS, SUZANNE L. REGISTRATION NUMBER: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
21P: 90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                        US-09-249-461-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24; Indels 16; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 KCPSNEIFSRCDGR-CQRFC------PNVVPKPLCIKICAPGCVCRLGYLRNKK 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Messens, Joris Hilda Lieven
APPLICANT: Lauwereys, Marc Josef
APPLICANT: Laroche, Yves Rene
APPLICANT: Jespers, Laurent Stephane
APPLICANT: Gansemans, Yannick Georges Jozef
APPLICANT: Moyle, Matthew
APPLICANT: Moyle, Matthew
APPLICANT: Bergum, Peter W
TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE
TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 356
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25.6%; Score 100; DB 3; Length 84; 30.4%; Pred. No. 0.00097; tive 8; Mismatches 24; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTAME: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/09/455
FILING DATE: April 17, 1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: OF/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/486,397
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: OCLODER 18, 1994
ATTORNEY/AGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,156
REGISTRATION NUMBER: 30,156
REGISTRATION NUMBER: 30,156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                216/270
                                                                                                                                                                                                                                                                                                          ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Ancyclostoma caninum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFA: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 59:
SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 30.4
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                        CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                          U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                90071
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-809-455-59
                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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Ouery Match 25.6%; Score 100; DB 3; Length 84;
Best Local Similarity 30.4%; Pred. No. 0.00097;
Matches 21; Conservative 8; Mismatches 24; Indels 16; Gaps 3;
Qy 11 KCPSNEIFSRCDGR-CQRFC-------PNVVPRPLCIKICAPGCVCRLGYLRNKK 57
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RESULT 14

US-09-249-448-59

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5 QCGENEKYDSCGSKECDKKCKYDGVEEEDDEEPNV---PCLVRVCHQDCVCEEGFYRNKD 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lauvereys, Marc Josef
APPLICANT: Laroche, Yves Rene
APPLICANT: Jespers, Laurent Stephane
APPLICANT: Garsemans, Yannick Georges Jozef
APPLICANT: Garsemans, Yannick Georges Jozef
APPLICANT: Moyle, Matthew
APPLICANT: Moyle, Matthew
APPLICANT: Bergum, Peter W.
TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 356
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PAPLICATION NUMBER: 08/809,455
FILING DATE: APRIL 17, 1997
APPLICATION NUMBER: PCT/0S95/13231
FILING DATE: October 17, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/466,390
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/35,110
FILING DATE: Owne 5, 1995
APPLICATION NUMBER: 08/35,110
FILING DATE: Owne 5, 1995
APPLICATION NUMBER: 08/35,110
FILING DATE: OCCOBER 18, 1994
ATTORNEY AGENT INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECHONE: (213) 955-0440
TELECOMMUNICATION INFORMATION:
TELECHONE: (213) 955-0440
TELECOMMUNICATION INFORMATION:
TELECHONE: (213) 955-0440
TELECOMMUNICATION INFORMATION:
TELECHONE: (213) 489-160
TELECOMMUNICATION:
TELECHONE: (213) 489-160
TELECOMMUNICATION:
TELECHONE: (213) 489-160
TELECOMMUNICATION:
TELECOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Vlasuk, George Phillip
APPLICANT: Stanssens, Patrick Eric Hugo
APPLICANT: Messens, Joris Hilda Lieven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFWARE: WORT PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/249,448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Ancyclostoma caninum
                                                                                                                                                                                                                                                                                                                                                                Sequence 59, Application US/09249448
Patent No. 6121435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Los Angeles
California
RY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: 14-
                                                                                             58 KVCVPRSKC 66
                                                                                                                                                                         62 DKCVSAEDC 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90071
                                                                                                                                                                                                                                                                                                                                       US-09-249-448-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                     g
                                                                                                 δ
                                                                                                                                                                         g
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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

February 26, 2003, 15:09:22; Search time 17 Seconds (without alignments) 378.883 Million cell updates/sec Run on:

Title: Perfect score:

US-09-506-978-1 391 1 GGFGGLGGRGKCPSNEIFSR......CRLGYLRNKKKVCVPRSKCG 67 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283224 seqs, 96134422 residues Searched:

19399 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 67

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		Description	motrvnsin/ela	chymotrypsin/elast	trypsin inhibitor	metallothionein -	metallothionein B	metallothionein -	metallothionein 4	metallothionein TV	metallothionein 2	metallothionein-2c	•		metallothionein 1A	metallothionein A		metallothionein 18	metallothionein 18		metallothionein 1	metallothionein -	metallothionein II	metallothionein Ta		metallothionein -	metallothionein I	metallothionein 1H	metallothionein-1	metallothionein Ic	
	;	di .		S08572	835098	S31723	B27490	S30567	A53640	B53640	A37425	S54335	S54336	A23889	SMHU1A	JC1449	S65712	SMHU1B	S69277	808190	A34905	JC2420	SMB02	800808	800800s	A38739	SMMSI	S47651	154574	800810	SMH01A
	9	DB:	7	7	~	~	7	7	~	7	7	7	7	7	-	7	7	П	7	7	7	7		7	7	~	П	7	7	7	7
	,	Length	63	63	62	9	9	9	62	62	61	62	62	61	61	61	52	61	61	63	63	9	61	61	61	65	61	61	61	61	09
æ	Query	Match			18.0			17.4	17.1	16.6	15.9	ഗ	ഹ	15.7	S	15.5	15.3	15.2	15.2	15.2	15.2	15.1	15.1	15.1	2	2	2	S	15.0	4	14.7
	1	score	80.5			69	69	68	67	65	62	62	· •		60.5		9	59.5		б	φ.	59	59	59	59	S	58.5	8	8	58	57.5
	Result	2	1	7	m	4	Ŋ	φ	7	ω	on ;	10	11	12	. 13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	29

5;

QQ Qy

Ouery Match

19.8%; Score 77.5; DB 2; Length 63;
Best Local Similarity 31.7%; Pred. No. 0.45;
Matches 19; Conservative 6; Mismatches 32; Indels

metallothionein - metallothionein 1E metallothionein 1B metallothionein 1X metallothionein 2 metallothionein 2 metallothionein 1F metallothionein A metallothionein A metallothionein I metallothionein I metallothionein I metallothionein I metallothionein I metallothionein II	ALIGNMENTS common roundworm sion 19-Mar-1997 #text_change 24-Jul-1997 s, S.M. 61, 1984 otrypsin/elastase from Ascaris lumbricoides: the pr 4255715; PMID:6564898 nhibitor Score 80.5; DB 2; Length 63; Pred. No. 0.23; i Mismatches 23; Indels 13; Gaps 4; -QRFCPNVVPRDCIKICAPGCVCRLGYLRNKKVC 60 ENTPCPLMCRRPSCECSPGRGMRHTNDGKC 54	#text_change 31-Oct-1997 from Ascaris lumbricoides: the px 4898
2 538335 1 1 SMHU1E 1 5 SMHOB 1 2 547652 1 1 SMH02 1 1 SMHX2 2 A33825 1 2 A33825 1 2 A33825 2 A33825 1 2 A25775 2 C01478 2 C01478 2 C01478 2 C01478 2 L23889 2 L48173	04 04 E80 4 C - C	iblitor - common roundworm coides (common roundworm) ence_revision 19-Mar-1997 (R.J.; Goos, S.M. 3.2, 143-161, 1984 (S.Z.; Grymotrypsin/elastase 7; MUID:84255715; PMID:6566 trypsin inhibitor
30 57.5 14.7 60 32 57.5 14.7 61 33 57.5 14.7 61 34 56.5 14.7 61 35 56.5 14.5 61 36 56.5 14.5 61 37 56.5 14.5 61 38 55.5 14.5 61 39 55.5 14.2 64 41 54.5 13.9 61 42 54.5 13.9 61 44 54.5 13.9 61 45 54.5 13.9 61	RESULT 1 S07127 S07127 S07127 C. Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 # C. Date: 19-Mar-1997 # C. Date: 19-Mar-1997 # C. Date: 19-Mar-1997 # C. Date: 19-Mar-1997 # C. Superfamily: roundworm trypsin inhibitor C. Date: CALL STATE	Qy 61 VPRSKC 66

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micallothionein 4 - human
N;Alternate names: metallothionein IV
C;Species: Homo sapiens (man)
C;Date: 05-Jan-1996 #sequence_revision 05-Jan-1996 #text_change 03-Dec-1999
C;Accession: A53640
E;Accession: A53640
E;Quaffe, C.J.; Findley, S.D.; Erickson, J.C.; Froelick, G.J.; Kelly, E.J.; Zambrowic Biochemistry 33, 7250-7259, 1994
A;Title: Induction of a new metallothionein isoform (MT-IV) occurs during differentia
C;Accession: A30818; B27490; S16997; S15509
R;Zafarullah, M.; Bonham, K.; Gedamu, L.
Mol. Cell. Biol. 8, 4469-4476, 1988
A;Title: Structure of the rainbow trout metallothionein B gene and characterization o A;Reference number: A30818; MUID:89039876; PMID:318557
A;Accession: A30818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Kille, P.; Stephens, P.E.; Kay, J.
Biochim. Biophys. Acta 1089, 407-410, 1991
A;Title: Elucidation of cDNA sequences for metallothioneins from rainbow trout, stone
A;Reference number: S16996; MUID:91316146; PMID:1859844
A;Accession: S16997
                                                                                                                                                                                                                                                                                                                                                          A;Title: The rainbow trout metallothioneins: molecular cloning and characterization o
A;Reference number: A27490; MUID:88111026; PMID:2448099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Pleuronectes platessa (plaice)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 20-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Accession: S30567
R;Leaver, M.J.; George, S.G.
submitted to the EMBL Data Library, November 1990
A;Reference number: S30567
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-60 <LEA>
A;Cross-references: EMBL:X56743; NID:g64237; PIDN:CAA40067.1; PID:g64238
C;Superfamily: metallothionein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:X59394; NID:g64332; PIDN:CAA42037.1; PID:g64333 C;Superfamily: metallothionein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: mRNA
A;Residues: 1-60 <BON>
A;Cross-references: GB:M18104; NID:g213816; PIDN:AAA49566.1; PID:g213817
                                                                                                                                                                                                                                                               A;Cross-references: GB:M18104; NID:g213816; PIDN:AAA49566.1; PID:g213817
R;Bonham, K.; Zafarullah, M.; Gedamu, L.
DNA 6, 519-528, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15 GGSCTC-KNCSCTTCNKSCCPCGCPK-----CASGCVC-----KGKTC 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15 GGSCKC-SNCACTSCKKSCCPCCPSDCSK-----CASGCVC-----KGKTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17.4%; Score 68; DB 2; Length 60; ilarity 35.2%; Pred. No. 3.7; Conservative 3; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17.6%; Score 69; DB 2; Length 60; 37.0%; Pred. No. 2.9; Live 2; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                metallothionein - plaice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-60 <ZAF>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-60 <KIL>
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Biochim. Biophys. Acta 1089, 407-410, 1991
A;Title: Elucidation of cDNA sequences for metallothioneins from rainbow trout, stone ld
A;Reference number: S16996; MUID:91316146; PMID:1859844
                                                                                                                                                                                                                                                                            Rigronenborn, A.W.; Nilges, M.; Peanasky, R.J.; Clore, G.M. Bochemistry 29, 1930
Bochemistry 29, 183-189, 1990
A;Title: Sequential resonance assignment and secondary structure determination of the As
A;Reference number: S35098; MUID:90212567; PMID:2322539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              metallothionein - northern pike
C:Species: Esox lucius (northern pike)
C:Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 20-Aug-1999
C;Accession: S38334; S17175; S15503: S31723
R;Kille, P: Kay, J: Sweeney, G.E.
Biochim Biophys. Acta 1216, 55-64, 1993
A;Title: Analysis of regulatory elements flanking metallothionein genes in Cd-tolerant
A;Reference number: S38334; MUID:94032489; PMID:8218416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 54, 90-7.
B27490-7.
B27490-7.
B27490-7.
C.Species: Oncorhynchus mykiss (rainbow trout)
C.Species: Oncorhynchus mykiss (rainbow trout)
C.Species: 18_Jul-1988 #sequence_revision 18-Jul-1988 #text_change 20-Aug-1999
                                                                                                                                                                                           C;Species: Ascaris suum (pig roundworm)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 KCPS-NEIFSRCDGRCQRFC-PNVVPKPLCIKICAP---GCVCRLGYLRNKKVCVPRSK 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X70042; NID:962782; PIDN:CAA49636.1; PID:962783 A;Note: the authors translated the codon ACT for residue 9 as Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: EMBL:X59392; NID:g62780; PIDN:CAA42035.1; PID:g62781
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 GGSCKC-SNCACTSCKKSCCSCCPSGCSK-----CASGCIC-----KGKTC 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18.0%; Score 70.5; DB 2; Length 62; 29.5%; Pred. No. 2.1; tive 12; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18; Indels
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Best Local Similarity 35.2%; Pred. No. 2.9;
Matches 19; Conservative 3; Mismatches 18; Indels
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C.Keywords: chelation; metal binding; metal-thiolate cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Superfamily: roundworm trypsin inhibitor
                                                                                                                                                                 trypsin inhibitor - pig roundworm
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                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-62 <GRO>
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A; Residues: 1-60 <KI3>
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A; Residues: 1-60 <KIL>
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R.Munger, K.; Germann, U.A.; Beltramini, M.; Niedermann, D.; Baitella-Eberle, G.; Kag
J. Biol. Chem. 260, 10032-10038, 1985
A;Title: (Cu,Zn)-metallothioneins from fetal bovine liver. Chemical and spectroscopic
A;Reference number: A22490; MUID:85261416; PMID:4019500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     metallothionein-2a - rabbit
C;Species: Oryccolagus cuniculus (domestic rabbit)
C;Species: Oryccolagus cuniculus (domestic rabbit)
C;Accession: S54336
R;Hunziker, P.E.; Kaur, P.; Wan, M.; Kaenzig, A.
Biochem. J. 306, 265-270, 1995
A;Title: Primary structures of seven metallothioneins from rabbit tissue.
A;Reference number: S54331; MUID:95169065; PMID:7864820
                                                                                                                                                                      C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 27-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 07-May-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   metallothionein 1 - bovine (tentative sequence)
C;Species: Bos primigenius taurus (cattle)
C;Date: 07-Mar.1988 #sequence_revision 07-Mar.1988 #text_change 28-Apr-1995.
C;Accession: A23889
                                                                                                                                                                                                                                            RiHunziker, P.E.; Kaur, P.; Wan, M.; Kaenzig, A.
Blochen, J. 306, 205, 1995
A;Title: Primary structures of seven metallothioneins from rabbit tissue.
A;Reference number: S54331; MUID:95169065; PMID:7864820
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                          25 KCTS-----CKKSCCSCCP-----PGCAK-CAQGCICK 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 62; DB 2;
Pred. No. 15;
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36.7%; Pred. No. 16;
tive 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.9%;
38.5%;
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                                                                                                                                                 metallothionein-2c - rabbit
                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-62 <HUN>
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A:Molecule type: protein
A:Residues: 1-62 <HUN>
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Best Local Similarity
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es 15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   metallothionein IV - mouse
C;Species: Mus musculus (house mouse)
C;Date: 05-Jan-1996 #sequence_revision 05-Jan-1996 #text_change 20-Aug-1999
C;Accession: B53640
R;Quaife, C.J.; Findley, S.D.; Erickson, J.C.; Froelick, G.J.; Kelly, E.J.; Zambrowicz, Biochemistry 33, 7260-7259, 1994
A;Title: Induction of a new metallothionein isoform (MT-IV) occurs during differentiatic
A;Reference number: A53640; MUID:94271779; PMID:8003488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Riwagner, G.; Neuhaus, D.; Woergoetter, E.; Vasak, M.; Kaegi, J.H.R.; Wuethrich, K. Eur. J. Biochem. 157, 275-289, 1986
A;Title: Sequence-specific (1)H-NMR assignments in rabbit-liver metallothionein-2.
A;Reference number: A37425, MgID:86220204; PMID:3709538
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C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C:Accession: A37425
                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A Accession: B53640
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-62 < QUA>
A; Cross-references: GB:U07808; NID:g466266; PIDN:AAA20233.1; PID:g516536
                                                                                                                            A;Cross-references: GB:U07807; NID:g466264; PIDN:AAA20232.1; PID:g516535 C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                              11 GICMCGDNCKCTTCNCKTCKKSCCPCCP-PGCAK-CARGCICKGG---SDKCSCCP 62
                                                                                                                                                                                                                                                                                                                                                                 7 GGRGKCPSNEIFSRCDGR-CQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVP 62
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                                                                                                                                                                                                                                                                      Length 62;
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A; Relification number: A53640; MUID:94271779; PMID:8003488
                                                                                                                                                                                                                                                                                                                     23;
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                                                                                                                                                                                                                                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
                                                                                                                                                                                                                                                                    Score 67; DB 2
Pred. No. 4.7;
8; Mismatches
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Pred. No. 7.4;
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                                                                                                                                                                                                                                                                    17.1%;
35.1%;
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33.98;
                                                                                                                                                                                      A;Introns: 11/1; 33/1
C;Superfamily: metallothionein
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C;Superfamily: metallothionein
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                                                                                                                                                                                                                                                                                                                     Conservative
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A;Molecule type: protein
A;Residues: 1-61 <WAG>
                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sest Local Similarity
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Best Local Similarity
Matches 15; Conserv
                                                              A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-62 <QUA>
                                         A; Accession: A53640
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C;Genetics:
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Gaps

12;

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7;

1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49

3,

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12;

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completed: February 26, 2003, 15:13:00 e : 17 secs
C; Superfamily: metallothionein C; Keywords: metal binding
                                                                                                                                                      Query Match
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Cell 37, 263-272, 1984
A;Title: Structural and functional analysis of the human metallothionein-IA gene: differ
A;Reference number: A24502; MUID:84205649; PMID:6327055
A;Accession: A24502
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A; Residues: 1-61 <BON>
A; Cross-references: GB-M18103; NID:g213814; PIDN:AAA49565.1; PID:g213815
A; Cross-references: GB-M18103; NID:g213814; PIDN:AAA49565.1; PID:g213815
B; Mille, P.; Stephens, P.E.; Kay, J.
Biochim. Biophys. Acta 1089, 407-410, 1991
A; Title: Elucidation of cDNA sequences for metallothioneins from rainbow trout, stone lc
A; Reference number: S16996; MUID:91316146; PMID:1859844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         F:1-29/Domain: beca <NH2>
F:30-61/Domain: alpha <ALE>
F:30-61/Domain: alpha <ALE>
F:30-61/Domain: alpha <ALE>
F:40-61/Domain: alpha <ALE
F:40
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A; Residues: 1-61 < HONN
B; Residues: 1-61 < HONN
B; R; Bohham, K.; Zafarullah, M.; Gedamu, L.
DNA 6, 519-528, 1987
A; Title: The rainbow trout metallothioneins: molecular cloning and characterization of A; Reference number: A27490; MUID:88111026; PMID:2448099
A; Accession: A27490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Cross-references: GDB:125559, OMIM:156350
A; Map position: 16q13-16q13
A; ntrons: 10/1, 32/1
C; Superfamily: metallothionein
C; Keywords: acetylated amino end; chelation; metal binding; metal-thiolate cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            metallothionein A - rainbow trout
C;Species: Oncorpynchus myKiss (rainbow trout)
C;Species: Oncorpynchus myKiss (rainbow trout)
C;Species: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 20-Aug-1999
C;Accession: JC1449; A27490; S16996; S15508
R;Hong, Y.; Schartl, M.
Gene 120, 277-279, 1992
A;Title: Structure of the rainbow trout metallothionein A gene.
A;Reference number: JC1449; MUID:93013046; PMID:1398141
                                                                                                                                                                                                                                                                                                      metallothionein 1A - human
C;Species: Homo saplens (man)
C;Date: 24-Jun.1987 *sequence_revision 09-Sep-1994 #text_change 22-Jun-1999
C;Accession: A24502
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A;Residues: 1-61 <KIL>
A;Crost.references: EMBL:X59395; NID:g64330; PIDN:CAA42038.1; PID:g64331
C;Geneties:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GB:K01383; NID:g187536; PIDN:AAA59586.1; PID:g386864
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10 GGSCTCAGSCKCKA----CRCPS-CKKSCCSCCPVG-CAK-CAQGCVCK 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 60.5; DB 1; Length 6
Pred. No. 20;
7; Mismatches 14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 GKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
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35.0%;
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Matches 14; Conservative
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A; Residues: 1-61 <RIC>
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metallothionein 1 - rat (fragments)
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Accession: S6-1996 #sequence_revision 13-Mar-1997 #text_change 09-May-1997
C;Accession: S65712
R;Saito, S.; Hunziker, P.E.
Biochim. Biophys. Acta 1289, 65-70, 1996
A;Title: Differential sensitivity of metallothionein-1 and -2 in liver of zinc-inject A;Reference number: S65712; MUID:96195842; PMID:8605234
A;Status: preliminary
                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                               Indels 13;
                                                                                          7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                        15 GGSCKCSNCACTSCKKASCCDCCPSGCSK-----CASGCVC-----KGKTC 55
Length 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 GGSCTCSSSCGCKNCKKSCCSCCPVGCSK-----CAOGCVCK 44
DB 2;
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Score 60.5; DB:
Pred. No. 20;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 60;
Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A: Molecule type: protein
A: Residues: 1-23;24-46;47-52 <SAI>
C: Superfamily: metallothionein
C: Keywords: blocked amino end
15.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15.3%;
                      Best Local Similarity 33.3
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 15.3
Best Local Similarity 34.9
Matches 15; Conservative
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GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

February 26, 2003, 15:06:27 ; Search time 13 Seconds (without alignments) 213.763 Million cell updates/sec Run on:

US-09-506-978-1 391 1 GGFGGLGGRGKCPSNEIFSR.....CRLGYLRNKKKVCVPRSKCG 67 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

112892 seqs, 41476328 residues Searched:

6419 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 67

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_40:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		Description	P56682 apis mellif	asca	52 ascaris	perca fl	38 ascar	oncorhyn	_	P07216 pleuronecte						P47945 mus musculu			orycto	P80290 oryctolagus		hom	P14425 stenella co	P09861 oncorhynchu	Q9ib50 pagrus majo		homo	canis	caeno	P15786 columba liv	chaenoc		_		
SUMMAKIES		ID	AMCI_APIME	ICEL ASCSU	ICE2_ASCSU	MT_PERFL	ITR1_ASCSU	MTB_ONCMY	MT_ESOLU	MT_PLEPL	MT_PSEAM	MT4_HUMAN	MT_BALMY	MTB_SALSA	MT_ZOAVI	MT4_MOUSE	MT_AMBME	MT4_CANFA	MT2A_RABIT	MT2C_RABIT	MT1_BOVIN	MT1A_HUMAN	MT2_STECO	MTA_ONCMY	MT_PAGMA	MT1B_HUMAN	MT1R_HUMAN	MT2_CANFA	MT2_CAEEL	MT1_COLLI	MTB_CHAAC	MTB_CHIHA	MTB_DICLA	MTB_PAGBE	MR TTONE
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æ	Query	Match	26.7	20.6	20.1	18.7	18.0	17.6	17.6	17.4	17.4	17.1	_	9	9	9	9	9	15.9	15.9	15.7	15.5	15.5	S	15.3	n o	2	15.2	S	15.2	15.1	S	15.1	2	ď
		Score	104.5	80.5	78.5	73	70.5	69	69	68	89	•	66.5	99	9	65	63.5	62.5	62	62	61.5	60.5	60.5	60.5		א עכ	σ,	59.5	σ,	σ	29	59	59	29	ביב
	Result	No.	-	2	က	4	S	ø	7	ω,	o é	0 ;	Ι.	77	13	14	15	16	17	18	19	20	21	22	23	47	57	75	27	28	29	30	31	32	~

P52726 oreochromis P04356 bos taurus P04356 bos taurus P09577 ovis aries Q27287 strongyloce Q92044 cyprinodon P0280294 homo sapien P02802 mus musculu 013258 chionodraco O73914 notothenia O93609 pagothenia P52721 thermarces O93450 parachaenic) Pancrustacea; Hexapoda; Hymenoptera; Apocrita;	athepsin G/chymotrypsin s mellifera."; INHIBITOR.	F CRC64; 3 1; Length 56;	5; 26; Indels LGYLRNKKKVCVP :1 : EGFLRNGEGACVL	63 AA. odate) update) Lumbricoides). lumbricoides). orea; Ascaridida; Ascaridoidea;
MT_OREMO	ALIGNMENTS PRT; 56 AA.	Last sequence update) Last annotation update) (AMCI). ybee). Arthropoda; Mandibulata; Neoptera: Endopterygota; pidae; Apis.	NMR. 4411628; blanowski A.; bl		Pr 7; VPKP 11	PRT;) quence up notation bitor 1 (Ascaris Chromadc
15.1 60 15.1 61 15.1 61 15.0 60 15.0 61 14.8 60 14.8 60 14.8 60	STANDARD; (Rel. 38, Cre	15-JUL-1999 (Rel. 38, Last see 30-MAY-2000 (Rel. 39, Last ann Chymotrypsin inhibitor (AMCI). Apis mellifera (Honeybee). Eukaryota; Metazoa; Arthropode Insecta; Pterygota; Neoptera; Aculeata; Apoidea; Apidae; Api [1]	JENCE, AND STRUCTURE BY NMR. JUE=Hemolymph; June=9939935; PubMed=1041162 July Stachowiak D., Polanow Imary Structure and propertie July from the larval hemoly J. Blochem. 262:680-687(199 FUNCTION: CHYMOTRYBEIN AND C SUBCELLULAR LOCATION: Secret JCCV; 12-MAR-99; TIL_Cysrich STRUCTON: CHYMOTRYBEIN SCRET JUNE JENOLESE; TIL; 1. PPOL826; TIL; 1.	3 36 12 32 16 28 20 56 38 50 66 AA; 5973 MW;	al Similarity 36.8%; Pr 21; Conservative 7; 7; KCPSNEIFSRCDGRCQRFCPNVVPKP :	ASCSU TICEL_ASCSU STANDARD; 1011_ASCSU O1-AUG-1988 (Rel. 08, Created 01-AUG-1988 (Rel. 08, Last se 11-5-JUL-1999 (Rel. 38, Last se Chymotrypsin/elastase isoinhi Ascaris suum (Pig roundworm) Eukaryota; Metazoa; Nematoda; ASCSTIGIAGE, SSCSTIS. NCBL_TAXID=6253;
34 35 36 37 37 38 39 40 58 55 41 58 42 43 58 58 58 58 58 58 58 58 58 58 58 58 58	RESULT 1 AMCI_APIME TD AMCI_APIME AC PS662; AC P5662; DT 15-JUL-1999	15-JUL-1999 (Rel. 3 30-MAY-2000 (Rel. 3 Chymotrypsin inhibil Apis mellifera (Hon Eukaryota; Metazoa; Insecta: Pterygota; Aculeata; Apoidea; NCBL_TaxID=7460; [1]	SEQUENCE, AND STRUCTURE TISSUE-Hemolymph; MEDLINE-99339935, Pubbe Bania J., Stachowiak D. Chymorek T. SubcELLULAR LOCATIC PDB; ICCV; 12-MAR-99. Therepro, IRP002919; Them. PP01826; TLL: 1.	CFI CFI CFI SNC SNC	7 7 7	J 1
	. RESUI AMCI. ID AC DT	DT DE DE OS OC OC OC OC OC OX	R R R R R R R R C C C C C C C C C C C C	FF FF SQ	ğ β β β β β β β β β β	RESUL ICEL, AC AC DT DT DT DT DE

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15-JUL-1999 (Rel. 38, Last annotation update)
ChymortypsLinyclastase isoinhibitors 2 to 5.
Ascaris suum (Pig roundworm) (Ascaris lumbricoides).
Eukaryota; Metazoa; Nematoda; Chromadorea; Ascaridida; Ascaridoidea;
                                                                                                                                                                                                                                                                          8 GRGKCPSNEIFSRCDG---RC---QRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                  MEDLINE-95006335; PubMed-7922044; Manno K., Stynadka N.C., Bernard V.D., Peanasky R.J., James M.N.; Manno K., Stynadka N.C., Bernard P.C., Peanasky R.J., James M.N.; "The molecular structure of the complex of Ascaris chymotrypsin/elastase inhibitor with porcine elastase.";
                                                                                                     Structure 2:679-689(1994).
                                                                                                                     -!- SIMILARITY: BELONGS TO THE ASCARIS TRYPSIN INHIBITOR FAMILY.
                                                           X-RAY CRYSTALLOGRAPHY (2.4 ANGSTROMS) OF COMPLEX WITH ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.

BY SIMILARITY.

SIMILARITY.

REACTIVE BOND.

K -> N (IN INHIBITOR 2 AND 4).
                                                                                                                                                                                                                                      20.6%; Score 80.5; DB 1; Length 63; 30.3%; Pred. No. 0.029; live 10; Mismatches 23; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Babin D.R., Peanasky R.J., Goos S.M.; "The isoinhibitors of chymotrypsin/elastase from Ascaris
                  Babin D.R., Peanasky R.J., Goos S.M.; "The isoinhibitors of Chymotrypain," is a soinhibitors in the primary structure."; Arch. Biochem. Biophys. 232:143-161(1984).
                                                                                                                                                                                                                REACTIVE BOND.
SDC10DE75B375F16 CRC64;
                                                                                                                                      InterPro: IPR002919; TIL_Cysrich. Pfam; PF01826; TIL; 1. Serine protease inhibitor; 3D-structure. DISULFID 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-84255715; PubMed-6564898;
           MEDLINE-84255715; PubMed-6564898;
                                                                                                                                                                                                                                                                                                                                                                                       01-AUG-1988 (Rel. 08, Created)
                                                                                                                                                                                                                          6862 MW;
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32
28
28
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Ascarididae; Ascaris.
                                                                                                                             PIR; S07127; S07127.
PDB; 1EAI; 05-APR-99.
                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                          63 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=6253;
                                                                                                                                                                                                                                                                                                             61 VPRSKC 66
                                                                                                                                                                                                                                                                                                                            55 IPASQC 60
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P07852;
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VARIANE
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                                                                                                                                              5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Gaps
                                                                                                                                                                                9 RGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR--LGYLRNKKKVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoldei;
                                                                                                                                                                                                                     1 RKPCGKNEVWTECTG-CELKCGODEKTPCALMCRPPSCECTPGRGMRRTHDGKCVPVSEC 59
T -> S (IN INHIBITOR 2 AND 4).
MISSING (IN INHIBITOR 2).
K -> E (IN INHIBITOR 3).
K -> R.
B4E5ICA166EA4BE3 CRC64;
                                                                                                           DB 1; Length 65;
                                                                                                                                                  32; Indels
                                                                                                         Score 78.5; DB Pred. No. 0.048; 6; Mismatches
                                                                                                                                                                                                                                                                                                                                                    01-0cT-1996 (Rel. 34, Created)
01-0cT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                 60 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PRO0860; MTVERTEBRATE.
PROSITE; PS00203; METALLOTHIONEIN_VRT; 1.
Metal-binding; Metal-thiolate cluster.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P28184; 1J19.
InterPro; IPR003019; Metallthion.
InterPro; IPR000006; Metllthion_vert.
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                                                                                                             20.1%;
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65
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65
7241 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Perca fluviatilis (Perch).
                                                                                                                                                  19; Conservative
                                                                                                                                                                                                                                                                                                                     STANDARD;
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                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=8168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Perca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Liver;
                                                                                                                                                                                                                                                                                                                 MT_PERFL
P52725;
                                                                              SEQUENCE
                                                                                                                   Query Match
                       VARIANT
                                          VARIANT
                                                               VARIANT
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                                                                                                                                                                                                       9 GGTCNCGGSCTC-TNCSCTTCKKSCCPCCPSGCPK-----CASGCVC-----KGKTC 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                           Ascaris suum (Pig roundworm) (Ascaris lumbricoides).
Eukaryota; Metazoa; Nematoda; Chromadorea; Ascaridida; Ascaridoidea;
Ascarididae; Ascaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 KCPS-NEIFSRCDGRCQRFC-PNVVPKPLCIKICAP---GCVCRLGYLRNKKKVCVPRSK 65
                                                                                                                                                                                                                                                                                                                                                                                                                  Peanasky R.J., Martzen M.R., Homandberg G.A., Cash J.M., Babin D.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gronenborn A.M., Nilges M., Peanasky R.J., Clore G.M.;
"Sequential resonance assignment and secondary structure
determination of the Ascaris trypsin inhibitor, a member of a novel
class of proteinse inhibitors.";
Biochemistry 29:183-189(1990).
-!- SIMILARITY: BELONGS TO THE ASCARIS TRYPSIN INHIBITOR FAMILY.
PDB; 1ATA; 31-AUG-94.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (In) McInnis A.J. (eds.);
Paradigms for eradicating helminthic parasites, pp.349-366,
Alan R. Liss, New York (1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18.0%; Score 70.5; DB 1; Length 62; 29.5%; Pred. No. 0.33; tive 12; Mismatches 22; Indels
                                                                                                                                                           22; Indels
                                                                                                                                   Score 73; DB 1; Length 60;
Pred. No. 0.17;
3; Mismatches 22; Indels
                                                                                                 CLUSTER A. E862A5EC16D7348A CRC64;
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                                                                                                                                                                                                                                                                                       01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
01-FEB-1996 (Rel. 33, Last annotation update)
                                                                                                                                                                                                                                                                     62 AA
                                                CLUSTER A. CLUSTER A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Serine protease inhibitor; 3D-structure.
                                                                        CLUSTER A. CLUSTER A.
            CLUSTER A
CLUSTER A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; 31-AUG-94.
IPR002919; TIL_Cysrich.
                                                                                                                                   18.78;
35.08;
                                                                                                           5926 MW;
                                                                                                                                               Local Similarity 35.0 les 21; Conservative
                                                                                                                                                                                                                                                                    STANDARD;
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                                                                                                                                                                                                                                                                                                                               Trypsin inhibitor (ATI)
 35
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1ATB; 31-AUG-94.
1ATD; 31-AUG-94.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRUCTURE BY NMR
                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=6253;
                                                                                                                                                                                                                                                                                                                                                                                                                               Litwiller R.D.;
                                                                                                                                                                                                                                                                    ITR1_ASCSU
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DISULFID
SEQUENCE
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                                                                                                            SEQUENCE
                                                                                                                                    Query Match
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SEQUENCE FROM N.A.

SECUES-S.alpinus; TISSUE-Liver;

Gerpe M., Xiling P., Olsson P.E.;

Gerpe M., Xiling P., Olsson P.E.;

Gerlolinus alpinus) following metal and PCB exposure.";

T (Salvelinus alpinus) following metal and PCB exposure.";

Mar. Environ. Res. 46:551-554(1998).

C. I- FUNCTION: METALLOTHIONEINS HARY METALS (BY STMILARITY).

C. I- FUNCTION: METALLOTHIONEINS CONTAIN 2 METAL.BINDING DOMAINS:

C. FOUR DIVALENT IONS ARE CHELATED WITHIN CLUSTER A DF THE ALPHA

DOMAIN AND ARE COORDINATED VIA CYSTEINYL THIOLATE BRIDGES TO 11

CYSTEINE LIGANDS. CLUSTER B, THE CORRESPONDING REGION WITHIN THE

SETAL DOMAIN, CAN LIGATE THREE DIVALENT IONS TO 9 CYSTEINES.

C. I- SIMILARITY: BELONGS TO THE METALLOTHIONEIN SUPERFAMILY; FAMILY 1.
                                                                                                                                                                                                                                                                                                            Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri), and Salvelinus alpinus (Arctic char).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Proteacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
NCBL TaxID=8022, 8036;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kille P., Stephens P.E., Kay J., "Elucidation of cDNA sequences for metallothioneins from rainbow trout, stone loach and pike liver using the polymerase chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bonham K., Zafarullah M., Gedamu'L.;
The rainbow trout metallothioneins: molecular cloning and
"The rainbow of two distinct cDNA sequences.";
DNA 6:519-528(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zafarullah M., Bonham K., Gedamu L., "Structure of the rathbow trout metallothionein B gene and "Structure of the metal-responsive region."; Mol. Cell. Biol. 8:4469-4476(1988).
                                                                                                                            01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
15-UNN-2002 (Rel. 41, Last annotation update)
Metallothionein B (MT-B).
                                                                         60 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Biochim. Biophys. Acta 1089:407-410(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
SPECIES-O.mykiss; TISSUE-Liver;
MEDLINE-91316146; PubMed=1859844;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPECIES=0.mykiss;
MEDLINE=89039876; PubMed=3185557;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; M18104; AAA49566.1; -.
EMBL; M22487; AAA49567.1; -.
EMBL; X59394; CAA42037.1; -.
EMBL; AF013801; AAB66343.1; -.
PIR; A30818, A30818
PIR; B27490; B27490.
                                                                         STANDARD;
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SEQUENCE FROM N.A.
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                                                                 MTB_ONCMY
P09862;
                                MTB_ONCMY
RESULT 6
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RESIDUES THAT BIND VARIOUS HEAVY METALS (BY SIMILARITY).
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nes 19; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Metallothionein (MT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                           60 AA;
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P07216;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                                                                                                                                                                  18; Indels 14; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDILINE-94032489; PubMed-8218416;
Kill& P., Kay J., Sweeney G.E.;
"Analysis of regulatory elements flanking metallothionein genes in Cetolerant fish (pike and stone loach).";
Biochim. Biophys. Acta 1216:55-64(1993).
-i- FUNCTION: METALLOTHIONEINS HAVE A HIGH CONTENT OF CYSTEINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Esox lucius (Northern pike).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygil; Teleostel; Euteleostel; Esociformes;
Esocidae; Esox.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           %ille P., Stephens P.E., Kay J.;
**Plucidation of cDNA sequences for metallothioneins from rainbow
                                                                                                                                                                                                                                                                                                                                   7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                15 GGSCKC-SNCACTSCKKSCCPCCPSDCSK-----CASGCVC-----KGKTC 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     trout, stone loach and pike liver using the polymerase chain reaction.";
                                                                                                                                                                                                                                                                                                 DB 1; Length 60;
                                                                                                                                                                                                                                                                       CLUSTER A.
9EA1E70FBE59B4EE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAY-1992 (Rel. 22, Created)
01-MAY-1992 (Rel. 22, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                         0.46;
                                                                                                                                                                                                                                                                                                                  2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                 60 AA
         PIR; S15509; S15509.
HSSP: P20184; 1J19.
InterPro; IPR003019; Metallthion.
InterPro; IPR0030006; MetlLthion_vert.
Pfam; PF00131; metalthio; 1,
PRIMTS; PR00860; MTVBRTEBRATE.
PROSITE; PS00203; METALLOTHIONEIN_VRT; 1.
Metal-binding; Metal-thiolate cluster.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Biochim. Biophys. Acta 1089:407-410(1991).
                                                                                                                                                                               CLUSTER A.
CLUSTER A.
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CLUSTER A.
CLUSTER A.
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                                                                                                                                                                                                                                                                                                 Score 69;
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8
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MEDLINE-91316146; PubMed-1859844;
                                                                                                                                                                                                                                                                                                           Pred.
                                                                                                                                                                                                                                                                                                 17.68;
                                                                                                                                                                                                                                                                                                          37.0%;
                                                                                                                                                                                                                                                                                6033 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Metallothionein (MT).
  PIR; S16997; S16997
                                                                                                                                                                                                                                                                                                           Best_Local Similarity
Matches 20; Conser
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P25127;
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MT_ESOLU
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DOMAIN: CLASS I METALLOTHIONEINS CONTAIN 2 METAL-BINDING DOMAINS: FOUR DIVALENT IONS ARE CHELATED WITHIN CLUSTER A OF THE ALPHA DOMAIN AND ARE CORDINATED VIA OYSTEINNY. THOLOTHE BRIDGES TO 11 CYSTEINE LIGANDS. CLUSTER B, THE CORRESPONDING REGION WITHIN THE BETA DOMAIN, CAN LIGATE THREE DIVALENT IONS TO 9 CYSTEINES. SIMILARITY: BELONGS TO THE METALLOTHIONEIN SUPERFAMILY: FAMILY 1.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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9EA1E43F95F8D97E CRC64;
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01-JUN-1994 (Rel. 29, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
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PROSITE; PS00203; METALLOTHIONEIN_VRT; 1.
Metal-binding; Metal-thiolate cluster.
                                                                                                                                                                                                                                                                                                                    EMBL; X59392; CAA42035.1; -.
EMBL; X70042; CAA49636.1; -.
EMBL; S1775; S17175.
PIR; S15503; S15503.
PIR; S31723; S31723.
HSSP: PO2795; 1MHU.
InterPro; IPR003019; Metallthion.
InterPro; IPR00006; Metllthion_vert.
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15 GGSCTC-KNCSCTTCNKSCCPCCPSGCPK-----CASGCVC-----KGKTC 54

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                                                                                                                                                                                                                                                                                                     BIOCHEM. SOC. Trans. 9:217-218(1981).

-!- FUNCTION: METALLOTHIONEINS HAVE A HIGH CONTENT OF CYSTEINE RESIDUES THAT BIND VARIOUS HEAVY METALS (BY SIMILARITY).

-!- DOMAIN: CLASS I METALLOTHIONEINS CONTAIN 2 METAL-BINDING DOMAINS:
FOUR DIVALENT IONS ARE CHELATED WITHIN CLUSTER A OF THE ALPHA DOMAIN AND ARE COORDINATED VIA CYSTEINYL THIOLATE BRIDGES TO 11 CYSTEINE LIGHNUS. CLUSTER B, THE CORRESPONDING REGION WITHIN THE BETA DOMAIN, CAN LIGATE THREE DIVALENT IONS TO 9 CYSTEINES.

-!- SIMILARITY: BELONGS TO THE METALLOTHIONEIN SUPERFAMILY; FAMILY 1.
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei; Acdnthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes; Pleuronectoidei; Pleuronectidae; Pleuronectes.
                                                                                                                                                                                                                                           Overnell J., Berger C., Wilson K.J.; Partial amino acid sequence of metallothionein from the plaice (Pleuronectes platessa).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 68; DB 1; Length 60;
                                                                                                                                                        Leaver M.J., George S.G.;
Submitted (NOV-1990) to the EMBL/GenBank/DDBJ databases
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PIR; A05076; A05076.
PIR; S30567; S30567.
HSSP; P28184; 1JT9.
InterPro; IPR003019; Metallthion.
InterPro; IPR000006; Metllthion_vert.
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                                                                   NCBI_TaxID=8262;
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Gaps
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Actinopterygii; Neopterygii; Neopterygii; Rateleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes;
Pleuronectoidei; Pleuronectidae; Pseudopleuronectes.
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                                                                                                                                                               Pseudopleuronectes americanus (Winter flounder) (Pleuronectes
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PRINTS; PR00860: MTVERTEBRATE.
PROSTIE; PS00203; METALLOTHIONEIN_VRT; 1.
MCLA1 binding; Metal-thiolate cluster; Copper; Acetylation.
MOD_RES 1 1 BETYLATION.
DOMAIN 1 28 BETA.
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                                                                   01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                        60 AA.
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InterPro; IPR000006; Metllthion_vert.
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Best Local Similarity
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                                    MT_PSEAM
P55945:
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RESULT 9
MT_PSEAM
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Gaps

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18; Indels

Pred. No. 0.58; 3; Mismatches

Best Local Similarity 35.2 Matches 19; Conservative

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GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- SIMILARITY: BELONGS TO THE METALLOTHIONEIN SUPERFAMILY; FAMILY 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.

MEDLINE-8421779; PubMed-8003488;
Qualfe C.J., Frindley S.D., Erickson J.C., Froelick G.J.,
Relly E.J., Zambrowicz B.P., Palmiter R.D.;
Relly E.J., Zambrowicz B.P., Palmiter R.D.;
Induction of a new metallothionein isoform (MT-IV) occurs during differentiation of stratified squamous epithelia.";
Blochemistry 33:7250-7259(1994).
                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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                                                                                                                              (Rel. 33, Created)
(Rel. 33, Last sequence update)
(Rel. 41, Last annotation update)
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InterPro; IPR000006; Metllthion_vert.
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                                                             STANDARD;
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                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
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                                                                                                                                 01-FEB-1996
                                                                                                                                                                                                      15-JUN-2002
                                                                                                                                                                  01-FEB-1996
                                                             MT4_HUMAN
P47944;
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                                                                                                                                                                Metallothionein (MT).
Balaena mysticetus (Bowhead whale).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Cetacea; Mysticeti; Balaenidae;
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PROSITE; PS00203; METALLOTHIONEIN_VRT; 1.
Metal-binding; Metal-thiolate cluster; Acetylation.
DOMAIN 1 29 BETA.
                                      16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P02795; ZMHU.
InterPro; IPR003019; Metallthion.
InterPro; IPR000006; Metllthion_vert.
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                   STANDARD;
                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                           NCBI_TaxID=27602;
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                                                                                                                                                           TISSUE=Liver;
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018842;
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RESULT 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Salmo.
                                       7;
17.0%; Score 66.5; DB 1; Length 61; 38.8%; Pred. No. 0.85;
                                                                          1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                             10 GGSCTCAGSCKCKECKCTS-CKKSCCSCCP----PGCTK-CAQGCVCK 51
                                      21; Indels
                                                                                                                                                                                                                                      01-ocr-1996 (Rel. 34, Created)
01-ocr-1996 (Rel. 34, Last sequence update)
10-10N-2002 (Rel. 41, Last annotation update)
Metallothionein B (MT-B).
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                                    2; Mismatches
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InterPro; IPR000006; Metllthion_vert.
Pfam; PF00131; metalthio; 1.
PRINTS; PR00860; MTVERTEBRATE.
PROSTTE; PS00203; METALLOTHIONEIN_VRT; 1.
Metal-binding; Metal-thiolate cluster.
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                                      19; Conservative
                                                                                                                                                                                                     STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                             Kille P., Olsson P.E.;
Submitted (APR-1996) to the EMBL/Genbank/DDBJ databases.;
submitted (APR-1996) to the EMBL/Genbank/DDBJ databases.;
-!- FUNCTION: METALLOPHIONEINS HAVE A HIGH CONTENT OF CYSTEINE
RESIDUES THAT BIND VARIOUS HEAVY METALS (BY SIMILARITY).
-!- DOMAIN: CLASS I METALLOPHIONEINS CONTAIN 2 METAL-BINDING DOMAINS:
FOUR DIVALENT IONS ARE CHELATED WITHIN CLUSTER A OF THE ALPHA DOMAIN AND ARE COORDINATED VIA CYSTEINYL THIOLATE BRIDGES TO 11
CYSTEINE LIGANDS. CLUSTER B., THE CORRESPONDING REGION WITHIN THE BETA DOMAIN, CAN LIGATE THREE DIVALENT IONS TO 9 CYSTEINES.
-!- SIMILARITY: BELONGS TO THE METALLOTHIONEIN SUPERFAMILY; FAMILY 1.
                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Zoarcoidei;
                                                                              Gaps
                                                                           14;
                                                                                                   7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                   15 GGSCKC-ANCACTSCKKSCCPCCPSGCSK------KGKTC 54
                                                Score 66; DB 1; Length 60;
Pred. No. 0.95;
3; Mismatches 18; Indels
                         187A9D0FBE5BD967 CRC64;
                                                                                                                                                                                                                 01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRINTS; PRO0860; MTVERTEBRATE.
PROSITE; PSO0203; METALLOTHIONEIN_VRT; 1.
Metal-binding; Metal-thiolate cluster.
CLUSTER A. CLUSTER A.
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InterPro; IPR003019; Metallthion.
InterPro; IPR000006; Metllthion_vert.
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                                                  16.9%; 35.2%; 1
58
59
5959 MW;
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                                                                                                                                                                                                                                                                                 Zoarces viviparus (Eelpout).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00131; metalthio;
                                                                            Conservative
                                                                                                                                                                                          STANDARD;
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                                                                                                                                                                                                                                                                                                                                    Zoarces.
                                                              Best Local Similarity
Matches 19; Conserv
58
59
60 AA;
                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=48416;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                 Zoarcidae;
                                                                                                                                                                                         MT_ZOAVI
P52728;
                          SEQUENCE
                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DOMAIN
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                                                                                                                                                                              MT_ZOAVI
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SQ
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                                                                                                                                                                                                                                                                                    4 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE SPECIFICITY: EXPRESSED EXCLUSIVELY IN STRATIFIED SQUAMOUS BETHELLEA ASSOCIATED WITH ORAL ENTHELIA, OESOPHAGUS, UPPER STOMACH, TAIL, FOOTPABLS, AND NEONATAL SKIN.
SIMILARITY: BELONGS TO THE METALLOTHIONEIN SUPERFAMILY; FAMILY 1.
                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                    Mismatches 17; Indels 14;
                                                                                                                                                                                                                                                                                                                                      GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                              15 GGSCKC-TNCSCTTCKKSCCPCCPSG-----CTK-CASGCVC------KGKTC 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | PRINTS: PRO0803; METALLOTHIONEIN_URT; 1. | PROSITE; PRO0803; METALLOTHIONEIN_URT; 1. | COPPER. | METAL | METAL | B | CLUSTER B (BY SIMILARITY). | METAL | B | CLUSTER B (BY SIMILARITY). | METAL | 14 | CLUSTER B (BY SIMILARITY). | METAL | 16 | CLUSTER B (BY SIMILARITY). | METAL | 20 | 20 | CLUSTER B (BY SIMILARITY). | METAL | 22 | 25 | CLUSTER B (BY SIMILARITY). | METAL | 22 | 25 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | METAL | 27 | 27 | CLUSTER B (BY SIMILARITY). | 27 | CLUSTER B (BY SIM
                                                                                                                                                                                                                                 Score 65; DB 1; Length 60; Pred. No. 1.2;
                                                                                                                                                       CLUSTER A. E87B8D4FB2BC471A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
CLUSTER A.
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InterPro; IPR003019; Metallthion.
InterPro; IPR000006; Metallthion_vert.
                                                                                                                                                                                                                                                            Pred. No
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MEDLINE-94271779; Pubmed-8003488;
                                                                                                                                                                                                                                                                                    3;
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                                                                                                                                                                                                                                 16.6%;
37.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Metallothionein-IV (MT-IV).
                                                                                                                                                                            6047 MW;
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                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                             musculus (Mouse)
                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                               60 AA;
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P47945;
                                                                                                                                                                               SEQUENCE
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                                                     METAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DIA CELL BIOL. 17:83-91(1998).

-I-FUNCTION: METALLOTHIONEINS HAVE A HIGH CONTENT OF CYSTEINE
RESIDUES THAT BIND VARIOUS HEAVY METALS (BY SIMILARIY).

-I-DOMAIN: CLASS I METALLOTHIONEINS CONTAIN 2 METAL-BINDING DOMAINS:
FOUR DIVALENT IONS ARE CHELATED WITHIN CLUSTER A OF THE ALPHA
DOMAIN AND ARE COORDINATED VIA CYSTEINYL THIOLATE BRIDGES TO 11
CYSTEINE LIGANDS. CLUSTER B, THE CORRESPONDING REGION WITHIN THE
BETA DOMAIN, CAN LIGATE THREE DIVALENT IONS TO 9 CYSTEINES.

-I-SIMILARITY: BELONGS TO THE METALLOTHIONEIN SUPERFAMILY; FAMILY 1.
                                                                                                                                                                                                                                                                 1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                 11 GGICICGDNCKCTTCSC-KTCRKSCCPCCP----PGCARGCICKGG---SDKCSC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukāryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomatidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seguin C.; "Cloning of a complementary DNA encoding an Ambystoma mexicanum metallothionein, AmMT, and expression of the gene during early
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Saint-Jacques E., Guay J., Wirtanen L., Huard V., Stewart G.,
                                                                                                                                                                                                         Score 65; DB 1; Length 62; Pred. No. 1.2;
                                                                                                                                                                                                                                     27; Indels
                                                                                                                   SIMILARITY).
SIMILARITY).
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                              SIMILARITY).
                                            SIMILARITY).
                                                                        SIMILARITY)
                                                                                                                                                                            8F78DA6D0744333A CRC64;
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Last annotation update)
CLUSTER B (BY S CLUSTER A (BY S
                                                                                                                                                                                                                                        4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR003019; Metallthion.
InterPro; IPR000006; Metllthion_vert.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Embryo;
MEDLINE=98127743; PubMed=9468225;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         6-OCT-2001 (Rel. 40, Created)
6-OCT-2001 (Rel. 40, Last seques-Jun-2002 (Rel. 41, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; AF008583; AAB71835.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ambystoma mexicanum (Axolot1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Metallothionein (MT) (AnMT).
                                                                                                                                                                                                           16.6%;
                                                                                                                                                                                                                          33.9%;
                                                                                                                                                                            6276 MW;
                                                                                                                                                                                                                                        21; Conservative
   P02795; 1MHU.
                                                                                                                                                                                                                         Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                             62 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=8296;
   330
337
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                                                                                                                                                                                                                                                                                                                                                                                                                               MT_AMBME
042152;
                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                           Query Match
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DR PRINTS; PRO0860; MTVERTEBRATE.

KW Metal-binding; Metal-thiolate cluster.

FT DOMAIN 1 29 60 ALPHA.

FT METAL 2 60 CLUSTER B.

FT METAL 13 11 CLUSTER B.

FT METAL 13 12 CLUSTER B.

FT METAL 13 12 CLUSTER B.

FT METAL 14 CLUSTER B.

FT METAL 22 22 CLUSTER B.

FT METAL 22 22 CLUSTER B.

FT METAL 24 24 CLUSTER B.

FT METAL 27 24 CLUSTER A.

FT METAL 31 31 CLUSTER A.

FT METAL 32 32 CLUSTER A.

FT METAL 42 42 CLUSTER A.

FT METAL 55 56 CLUSTER A.

FT METAL 55 56 CLUSTER A.

FT METAL 56 56 CLUSTER A.

FT METAL 59 59 CLUSTER A.

FT METAL 56 56 CLUSTER A.

FT METAL 59 59 CLUSTER A.

FT METAL 59 50 CLUSTER A.

FT METAL 59 50 CLUSTER A.

FT METAL 59 50 CLUSTER A.

FT METAL 50 CL
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Search completed: February 26, 2003, 15:10:59 Job time : 14 secs

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February 26, 2003, 15:08:52 ; Search time 91 Seconds
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151.705 Million cell updates/sec
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391
I GGFGGLGGRGKCPSNBIFSR.....CRLGYLRNKKWCVPRSKCG
                                                                                                                                                                                                                                                                                                                                                                             56343
GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Perfect score:
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1: SP_acteria:*
2: SP_bacteria:*
3: SP_fungi:*
4: SP_invertebrate:*
5: SP_invertebrate:*
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7: SP_mham:*
8: SP_organelle:*
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15: SP_norlassified:*
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Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	077419 ascaris suu	Q8wvb5 homo sapien	Q9ps78 qallus qall	098tp9 platichthys	Q99kf9 mus musculu	Q8tdn3 homo sapien	O9bsk9 homo sapien	098tc0 seriola qui	Q9bqn2 homo sapien	Q8te66 homo sapien	Q8uvyl lithognathu	098si5 leuciscus c	Q12928 homo sapien	Q8tdc4 homo sapien	O9pvq7 xiphophorus	Q8xp54 clostridium
SUMMARIES	TD	077419	Q8WVB5	Q9PS78	Q98TP9	Q99KF9	Q8TDN3	Q9BSK9	Q98TC0	Q9BQN2	Q8TE66	Q8UVY1	098815	012928	Q8TDC4	Q9PVG7	Q8XPB4
Suery	religin DB	62 5	61 4	51 13	40 13	44 11	61 4	63 4	48 13	58 4	61 4	60 13	49 13	48 4	61 4	39 13	59 16
& Query	Match	22.6	16.2	16.1	16.0	16.0	15.3	15.2	15.1	15.0	15.0	14.8	14.7	13.9	13.9	13.6	13.6
9	2000	88.5	63.5	63	62.5	62.5	09	59.5	59	58.5	58.5	58	57.5	54.5	54.5	53	53
Result		1	7	m	4	2	9	7	æ	6	10	11	12	13	14	15	16

O8tcs1 homo sapien		065918 picea maria		Q8tnn8 methanosarc		Q95u91 scylla serr	9	Q97bh4 thermoplasm			eriocheir	Q9twf8 anemonia su	Q9s8d2 cucumis mel	077625 bos taurus	Q9udp7 homo sapien	Q9hj78 thermoplasm	7	Q9n9h2 venerupis (vis	Q9pvg6 xiphophorus	Q9n9h0 venerupis p	Q9viy8 drosophila	Q93gh5 bacillus su	Q9bjk0 bactrocera	4		~	
66 4 Q8TCS1	Ŋ		16	17	2	2	16	17	2	S	Ŋ	ς O	10	9	4		11	2	4	9	13	S	2	7	S	S	67 13 Q90793	11	
13.	.5 13.	$\overline{}$	13.	1 13.	5 12.	12.	0 12.	9.5 12.	.5 12.	9 12.	9 12.	12.	. 1	3.5	5 12	12.		12.	12.	12.	Н	7 12.	7 12.	7 12.	7 12.	5 11.	6.5 1	6 11.	
17	18	19	20	21	22	23	24	25	56	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	

ALIGNMENTS

RESULT 077419	LT 1
ID AC	O77419 PRELIMINARY; PRT; 62 AA. O77419;
D	
55	01-NOV-1998 (TremBirel. 08, Last sequence update) 01-IIN-2002 (TremBirel 21 Last annotation undate)
DE	c`
Z 0	ASC/E-1.
3 S	Ascails suum (Fig Loundworm) (Ascails Lumbilcoldes). Eukarvota: Metazoa: Nematoda: Chromadorea: Ascaridida: Ascaridoidea:
8	aris.
XO.	NCBI_TaxID=6253;
N C	
y X	SEQUENCE FROM N.A. Meditine=98297373: Pubmod=9635450.
RA	Lu C.C., Nquyen T., Morris S., Hill D., Sakanari J.A.;
RŢ	"Anisakis simplex: mutational bursts in the reactive site centers of
RT	serine protease inhibitors from an ascarid nematode.";
RL	Exp. Parasitol. 89:257-261(1998).
Z G	EMBL, 0944991, 1AT AACOLSOO.1;
Z G	HSSP, PU/851 IEA1.
Z 5	INTERFICO INVOLVED ILL CYSTICA.
ž E	Prami Pruszo, Til.
Į.	(
SO	NON_TER 62 62 SEQUENCE 62 AA; 6794 MW; 154CE25A375E0B2C CRC64;
(
5 X	Query Match Best Local Similarity 33.3%; Pred. No. 0.00022;
M	rative 9
QY	8 GRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKVCVPR 63
qq	1 GQERCGPNEVWTECTG-CEMKCGDPENTPCPLMCRRPSCECSPGRGMRTNDGKCIPA 57
QY	64 SKC 66
5	:
3	נ גע

RESULT 4

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4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE-96414636; PubMed-8817657;
Allander S.V., Ehrenborg E., Luthman H., Powell D.R.;
Allander S.V., Ehrenborg E., Luthman H., Powell D.R.;
Conservation of IGFBP structure during evolution: cloning of chicken insulin-like growth factor binding protein-5.";
Prog. Growth Factor Res. 6:159-165(1995).
InterPro; IPR000867; Insl_gro_fac_pr.
SMART; SM00121: IB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gallus gallus (Chicken).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
11sulin-like growth factor binding protein-5, IGFBP-5 (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4;
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Έ
                                                                                                                                                                                                                                                                                                                                                                                                            16.2%; Score 63.5; DB 4; Length 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 63; DB 13; Length 51;
Pred. No. 0.46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11; Indels
                                                                                                                                                                                                                                                       Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases. EMBL: BC018190; AAH18190.1; -. InterPro: IPR003019; Metallthion. InterPro: IPR000006; Metllthion_vert. Pf00131; metalthio; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 GGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11 GSCACAGSCKCNE--CKCTS-CKKSCCSCCPVG-CAK-CAQGCICK 51
                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00203; METALLOTHIONEIN_VRT; UNKNOWN_1.
SEQUENCE 61 AA; 6054 MW; 3C4827F942E986B5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51 AA; 5127 MW; 662EA453F4CCB267 CRC64;
                                                            01-MAR-2002 (TrEMBLrel. 20, Created)
1-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Similar to metallothionein 1L.
                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 0.47;
6, Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 0.46
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 CDGKALSLCP---PPPLGCELVKEPGCGCCL 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 CIGRCORFCPNVVPKPL-CIKICAPGCVCRL 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequ
01-JUN-2002 (TrEMBLrel. 21, Last anno
                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00222; IGF_BINDING; 1.
                                                                                                                                                                                                                                                                                                                                           PRINTS; PR00860; MTVERTEBRATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                          34.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 34.88
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 45.2
Matches 14; Conservative
                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      51
                                                                                                                                                                                                                                              Strausberg R.;
                                                                                                                                                                                                                             TISSUE-OVARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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NON_TER
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                                              Q8WVB5;
                             Q8WVB5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09PS78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
RESULT 2
             Q8WVB5
                                                q
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European flounder (Platichthys flesus).",

Submitted (FEB-2001) to the BMEL/GenBank/DDBJ databases.

L. Submitted (FEB-2001) to the BMEL/GenBank/DDBJ databases.

I. Submitted (FEB-2001) WARIOUS HAVE A HIGH CONTENT OF CYSTEINE

RESIDUES THAT BIND VARIOUS HEAVY METALS (BY SIMILARITY).

PRESIDUES THAT BILD VARIOUS TO THE METALLOTHIONEIN SUBERFAMILY; FAMILY 1.

RESP; P02795; 1MHU.

RIGHTON: PRO00006; Metallthion.

PROSTITE; PS001203; METALLOTHIONEIN VRT; 1.

PROSTITE; PS001203; METALLOTHIONEIN VRT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                Platichthys flesus (European flounder).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Neopierygii; Teleostei; Euteleostei; Neopeleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes;
Pleuronectoidei; Pleuronectidae; Platichthys.
NCBI_TaxID=8260;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 13; Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 11; Length 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg R.; Strausberg R.; Submitted (MAR-2001) to the EMBL/GenBank/DDBJ databases. EMBL; BC004681; AAH04681.1; -. MGD; MGI:1919666; 3110001K13Rik.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hypothetical protein.
SEQUENCE 44 AA; 4900 MW; C49523A82D448591 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40 AA; 4010 MW; B5CEB05E4200855B CRC64;
                                             01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 GGSCTC-KNCSCTTCNKSCCPCCPFGCPK-----CASGCVCK 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2001 (TrEMBLrel. 17, Created)
1-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Hypothetical 4.9 KDa protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25 CORFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16.0%; Sco...
37.2%; Pred. No. v...
... 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 62.5; DB
Pred. No. 0.47;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 62.5; DB Pred. No. 0.43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                  Metallothionein (MT) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 33.3
es 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3110001K13RIK.
                                                                                                                                                                                                                                                                          TISSUE=OVARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                              Q98TP9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q99KF9;
              098TP9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q99KF9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
298TP9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q99KF9
                                qq
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Purent K., Maita M.;

Purant K., Maita M.;

The Molecular cloning of metallothionein cDNA from yellow tail (Seriola Molecular cloning) of environmental pollution.";

The Quinqueradiata) for monitoring of environmental pollution.";

The Quinqueradiata of processing the Content of CYSTEINE CHARLOTHIONE METALLOTHIONE METALLOTHIONE OF CYSTEINE

RESIDUES THAT BIND VARIOUS HEAVY METALS (BY SIMILARITY).

THE RESIDUES THAT BIND VARIOUS HEAVY METALS (BY SIMILARITY).

THE PROSTAT HEALOTHIONE TO THE METALLOTHIONEIN SUPERFAMILY; FAMILY 1.

RESP: PO2795, IMHU

INTERPRO; IPRO00006; Metallthion.

TherPro; IPRO00006; Metallthion.

TherPro; IPRO00006; Metallthion.

TherPro; IPRO00006; Metallthion.

TherPro; IPRO00003; METALLOTHIONEIN.VRT; 1.

RESP: PO3795, METALLOTHIONEIN.VRT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (FEB-2001) to the EWBL/GenBank/DDBJ databases.
-!- FUNCTION: METALLOTHIONEINS HAVE A HIGH CONTENT OF CYSTEINE
RESIDUES THAT BIND VARIOUS HEAVY METALS (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE METALLOTHIONEIN SUPERFAMILY; FAMILY 1.
EMBL; AL121753; CAC34280.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Neopterygii, Teleostei, Euteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Percoidei,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 GGSCTC-TNCSCTTCKKSCCPCPSG-----CTK-CASGCVC------KGKTC 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.0%; Score 58.5; DB 4; Length 58; 37.5%; Pred. No. 2.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                15.1%; Score 59; DB 13; Length 48; 35.2%; Pred. No. 1.5; ative 3; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                               48 AA; 4732 MW; 17ADDD345E376867 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS00203; METALLOTHIONEIN_VRT; 1.
Chelation; Metal-binding; Metal-thiolate cluster.
SEQUENCE 58 AA; 5760 MW; D386349E68A2DA3B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 GKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HSSP; P02795; IMHU.
InterPro; IPR001396; Echnd_Metthion4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR000006; Metllthion_vert.
InterPro; IPR001008; Mtllthion_mlsc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IPR003019; MetalIthion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR001008; Mtllthion
Pfam; PF00131; metalthio; 1.
PRINTS; PR00873; MTECHINOIDEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRINTS; PR00875; MTMOLLUSC.
PRINTS; PR00860; MTVERTEBRATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUN-2001 (TrEMBLrel. 17,
01-JUN-2001 (TrEMBLrel. 17,
01-MAR-2002 (TrEMBLrel. 20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 37.59
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                             Carangidae; Seriola.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Metallothionein (MT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                         NCBI_TaxID=8161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DJ61404.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09BQN2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         O9BON2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Clark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                    Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 59.5; DB 4; Length 63; Pred. No. 1.7;
                                                                                                                                                                                                                                                                                                                                                                                                        15.3%; Score 60; DB 4; Length 61;
                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
Wang J., Yu L., Zhao S.;
Wang J., Yu L., Zhao S.;
"Cloning of a novel member of the MT gene family-MTIM.";
Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF348671; AAL83902.1;
SEQUENCE 61 AA; 6110 MW; 754753ED088411CE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                            17; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (MAR.2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC004969; AAH04969.1; -.
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10 GKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRN 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63 AA; 5927 MW; 8DF7AB2529D8628C CRC64;
                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
 10 FLCVCVSV-----CVSVCVSVCVCLCVYMR-----AHMPMSKC 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seriola quinqueradiata (Five-ray yellowtail).
                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 1.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                           5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           48 AA.
                                                                                                                  01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last seq
01-JUN-2002 (TrEMBLrel. 21, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
                                                                                       PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-2001 (TrEMBLrel. 17, Le 01-DEC-2001 (TrEMBLrel. 19, L. Hypothetical 5.9 kDa protein.
                                                                                                                                                                                                                                                                                                                                                                                                                         39.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 29.4%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q9BSK9;
01-JUN-2001 (TrEMBLrel. 17,
                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 39.19 hes 18; Conservative
                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
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                                                                                                                                                                       Metallothionein 1M
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                                                                                                                                                                                                                                                      NCBI_TaxID=9606;
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Q98TC0;
                                                                                                    CNGT80
                                                                                    Q8TDN3
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                                                  RESULT 6
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Q98TC0
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Cyprinidae;
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qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δλ
                                                                                                                                                                                                                                                                                         4;
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                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota: Metazoa: Chordata: Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei;
                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 GGSCSC-TNCSCTSCKKSCCSCCPAGCSK-----CASGCVC-----KGKTC 54
                                                                                                                                                                                                                                                                  DB 4; Length 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 58; DB 13; Length 60; Pred. No. 2.5;
                                                                                                                                           Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Metallothionein levels in Lithognathus mormyrus liver.";
Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AF321007; AAL37187.1;
                                                                                                                                                                                                                                                                                         15; Indels
                                                                                                                                                                                                  Van Weyenbergh J., De Ley M.;
"Human monocyte zinc-induced mRNA MT2A/1A hybrid.";
Submitred (JAN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL: AY077636; AAL/56084.1; -.
SEQUENCE 61 AA: 6118 MW; 600A7EIF999EFA09 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5936 MW; 7872414669F3B91B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                    01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Zinc-induced metallothionein 2A/1A hybrid.
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PS00203; METALLOTHIONEIN_VRT; UNKNOWN_1
                                                                                                                                                                                                                                                                                                             10 GKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                                                                                                                                                                                                                                                  17 GSCKCKE--CKCTS-CKKSCCSCCPMS-CAK-CAQGCICK 51
AA.
                                                                                                                                                                                                                                                                                                                                                                                         60 AA.
                                                                  AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33.3%; Pred. www.
                                                                                                                                                                                                                                                                   15.0%; score 58.5; DI 35.0%; Pred. No. 2.2;
                                                                                                                                                                                                                                                                                         6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lithognathus mormyrus (Striped seabream)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Interpro: IPR003019; Metallthion.
Interpro: IPR0000066, MetlLthion_vert.
Pfam: PP00131; metalthio: 1.
PRINTS: PR00860; MTVERTEBRATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                PRT;
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                                                                                                                                                                                                                                                                             Local Similarity
nes 14; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            - PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sparidae; Lithognathus.
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                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=50591;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Metallothionein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tom M.;
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                                                                                                                                                                                                                                                                                                                                                                                                      38UVY1:
                                                                             28TE66;
                                                                                                                                                                                                                                                                                                                                                                                          Q8UVY1
                                                                  Q8TE66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
Q98SI5
ID Q98SI
                                                                                                                                                                                                                                                                                          datches
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                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
                                            RESULT 10
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                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Identification of a human thrombospondin-1 isoform generated by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 57.5; DB 13; Length 49; Pred. No. 2.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13.9%; Score 54.5; DB 4; Length 48; 31.7%; Pred. No. 5.9; tive 2; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dimitry J.M., Sheibani N., Finn M., Boak B.M., Paul L.L., Frazier W.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         alternative splicing.";
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
EMBL; U12471; AAA21126.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             728FC778BD079EDF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49 AA; 4803 MW; AFCDC7534D883CBA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9 GATCKC-TNCOCTTCKKSCCTCCPSGCSK-----CASGCVCK 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22 DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKVCVP 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 DGEC---CPR-----CWPRCDCSRGAWADGKETCCP 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00131; metalthio; 1.
PROSITE; PS00203; METALLOTHIONEIN_VRT; 1.
Chelation; Metal-binding; Metal-thiolate cluster.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR003019; Metallthion.
InterPro; IPR000006; Metllthion_vert.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                     Metallothionein (MT) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Thrombospondin-p50 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14.7%;
34.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5132 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 31.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 34.9 tes 15; Conservative
                                                                                                                     Leuciscus cephalus (Chub)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                          Leuciscus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48 AA;
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                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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MEDLINE-99126443; PubMed-9927468;
Gutbrod H., Schartl M.;
Intragenic sax-chromosomal crossovers of Xmrk oncogene alleles affect pigment pattern formation and the severity of melanoma in Xiphophorus.";
Kiphophorus.";
Genetics 15:173-783(1999).
EMBL; AF092693; AAD03714.1; -.
InterPro; IPR002174; Furin-like; 1.
                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Xiphophorus maculatus (Southern platyfish).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;

Cyprinodontiformes; Poeciliidae; Xiphophorus.
                                  01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Metallochionein 1Y.
Homo sapiens (Human).
ENKaryota: Metazoa: Chordata: Craniata: Vertebrata; Euteleostomi:
Mammalia: Eutheria: Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                               υ,
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                                                                                                                                                                                                                                                                       13.9%; Score 54.5; DB 4; Length 61; 38.5%; Pred. No. 7.5; tive 4; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 13.6%; Score 53; DB 13; Length 39; Best Local Similarity 42.9%; Pred. No. 7.7; Matches 12; Conservative 3; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               39 39 39 42303BA05F6DB557 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Receptor tyrosine kinase Xmrk (Fragment).
                                                                                                                                                                                                                                                                                                                           10 GKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVC 48
                                                                                                                                                                                                                                                                                                                                               17 GSCKCKE--CKCTS-CKKSCCSCCPVG-CAK-CAHGCVC 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 CDGRCQRFCPNVVPKPL--CIKICAPGC 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 CAEQCNRRCRG -- PKPIDCCNEHCAGGC 30
               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                    Local Similarity 38.5
              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                    NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=8083;
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NON_TER
SEQUENCE
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          Q8TDC4
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Matches
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Q8TDC4
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Search completed: February 26, 2003, 15:12:38 Job time: 92 secs

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February 26, 2003, 15:05:47; Search time 35 Seconds (without alignments) 255.080 Million cell updates/sec
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391
1 GGFGGLGGRGKCPSNEIFSR......CRLGYLRNKKVCVPRSKCG
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GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
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Maximum Match 100%
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Gapop 10.0 , Gapext 0.5
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES			Describtion	ABB08330 Bee venom protein	AAY30434 Mature nematode ex	AAB15319 N. americaun nema	AAY30433 Mature nematode ex		ABP32832 Human ORF1805 prot	ABB77804 Consensus sequence	AAO21321 Arabidopsis thalia	AAB60286 Human factor IX (h	AAY57822 Rabbit liver metal
מנ		£	1	ABB	AAY	AAB	AAY	AAY	ABP	ABB	AAO	AAB	AAY
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		Query	rendru	29	61	61	58	59	59	62	63	43	61
	ф	Query	ייםרכוו	100.0	21.0	21.0	17.4	16.2	16.2	16.0	16.0	15.9	15.9
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		Result	2		5	3	4	5	9	7	8	6	10

New bee venom polypeptides, useful for modulating immune responses e.g. in individual hypersensitive to the venom and for identifying individual at risk for bee venom hypersensitivity

(ECOL-) ECOLE POLYTECHNIQUE FEDERALE LAUSANNE.

WPI; 2002-082988/11.

Spertini F;

18-FEB-2000; 2000US-0506978.

		61.5	15.7	29		AAB61455	Metallothionein do
	7	61	S	47		AAY04648	_
	e	61	വ	26		AAB44778	ted pr
	4	61	വ	99		AAU45263	cteri
	D.	09	വ	09		ABP01364	ORFX
	9	59.5	വ	61		AAU28133	Novel human secret
	٧,	20	വ	61		AAW61601	Human metallothion
	ω (58.5	വ	6 E		AAY02082	KTX peptide used t
	ט י	58.5	വ	61		AAM40263	Human polypeptide
	0,	28	4	56		AAU48798	Propionibacterium
	_	57.5	4	29		AAM79414	Human protein SEQ
	7	27	4	10		AAY69218	N-terminal sequenc
	m	22	4	40		AAP40692	Sequence encoded b
	4	22	₹"	40		AAP40220	Partial sequence o
	2	56.5	4	52		AAM39148	Human polypeptide
	9	56.5	4	09		AAR40209	Sequence of human
	7	56.5	4	09		AAY82332	Human metallothion
	80	56.5	4	61		AAB12587	Himan metallothion
	0	56.5	4	61		AAY82331	Human metallothion
	0	56.5	4	9		AAM78430	Himan protein SEO
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	י עכ	55.5	4.	53		AAB12521	Beta-cellulin mute
	٥,	55.5	4	09		AAM49082	Metallothionein fr
		55.5	₹.	63		AAY57811	Chicken metallothi
	2	55.5	₹.	67		ABP09671	Human ORFX protein
	543	22	14.1	51	ا و	AAP50547	υ·
	d L	ກິ	4 (9 9		AAU55134	Propionibacterium
	n	04.0	າ	4, D		AAB1.2514	Beta-cellulin mute
						ALIGNMENTS	
RESULT	ILT 1						
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AC	ABB083	330;					1-
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DE	Bee ve	venom pr	protein Api	oi m 6	.01		
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K K K	bee ve immunc	bee venom; 1 bee venom hy immunotherap	.solorm; Tpersensi Y; allei	ımmun itivit :gen.	ıosn :Y;	venom; isolorim; immunosuppressant; vaccine; venom hypersensitivity; antibody; protein p notherapy; allergen.	le; Apı m 6; ımmune response; ı purification; Api m 6.01;
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PD	22-NO	-NOV-2001.					
PF	16-FE	-FEB-2001;	2001WO-1B01736	.IB017	36.		
XX	,	6			;		

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                                         The present sequence is that of one the four isoforms of Api m 6, designated Api m 6.01. The sequence represents the central amino acid sequence shared by all four isoforms (see ABB08313, ABB0832 and ABB08313). The specification describes a substantially pure polypeptide, Api m 6, derived from bee venom and found in four isoforms. The proteins of the invention have immunosuppressant activity and may form the basis of a vaccine. Api m 6 is useful for modulating an immune response. I.e. as an allergen for immunotherapy. The protein is useful for identifying an individual at risk for bee venom hypersensitivity. The method comprises administering Api m 6 to the individual and measuring an immune response raised, where a detectable immune response indicates that the individual is at risk for bee venom hypersensitivity. Antibodies specific
                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                          1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                           1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Screening an isolated protein for Nematode-extracted Anticoagulant
Protein domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nematode extracted anticoagulant protein; NAP; anticoagulant; serine protease inhibitor; NAP domain; factor VIIa/TF.
                                                                                                                                                                                                                                                                                                        100.0%; Score 391; DB 23; Length 67; 100.0%; Pred. No. 8e-32; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mature nematode extracted anticoagulant protein NamNAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bergum PW, Gansemans YGJ, Jespers LS, Laroche YR;
Lauwereys MJ, Messens JHL, Moyle M, Stanssens PEH;
                                                                                                                                                                                                                                          for Abi m 6 are useful for purifying the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Columns 143-144; 197pp; English.
               Example 2; Page 26; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY30434 standard; Protein; 61 AA.
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95US-0461965.
95US-0465380.
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95US-0486399.
95WO-US13231.
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                                                                                                                                                                                                                                                                                                                       1 Similarity 100.0
67; Conservative
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                                                                                                                                                                                                                                                                            67 AA;
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61 VPRSKCG 67
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05-JUN-1995
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                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY30434;
                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
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The present sequence represents a nematode extracted anticoagulant protein (MAP). The protein contains at least one NAP domain which has selective inhibitory activity as an anticoagulant and/or serine protease inhibitory activity for factor VIIa/TF. The specification has selective inhibitory activity for factor VIIa/TF. The specification for factor VIIa/TF selective inhibitory activity. The method comprises determining the time to clotting effected by a concentration of the isolated protein in an ex vivo profirombin time (PT) assay and an ex vivo prolongation of clotting effected by the isolated protein in each of the pT and appraisable the pT and appraisabl
                                                                                                                                                                                                                                                                                                                                                   a doubling of clotting time is deemed a two-fold elevation; and calculating a PT to aPTT prolongation ratio, where a ratio at least one is indicative of factor VIIa/TF inhibitory activity. The method is useful for determining if a protein has factor VIIa/TF inhibitory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19; Indels 10; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Moyle M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nematode-extracted anticoagulant protein; NamNAP; blood clotting; canine hookworm; thrombosis; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New cDNA molecule encoding a protein having factor Xa inhibitory activity for preventing and treating blood clotting disorders, comprises nematode-extracted anticoagulant protein domains -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12 CPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCV----CRLGYLRNKKVCV 61

    N. americaun nematode-extracted anticoagulant protein NamNAP.

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LaRoche YR, Vlasuk GP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 20; Length 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21.0%; Scor.
30.9%; Pred. No. o.c.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 82; DB 20
Pred. No. 0.37;
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95US-0486397.
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Best Local Similarity 30.9°
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CORV-) CORVAS INT INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAA73383
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05-JUN-1995;
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05-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bergum PW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB15319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB15319
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factor VIIa/TF selective inhibitory activity. The method comprises

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The present sequence is the Necator americanus nematode-extracted anticoagulant protein NamNAP. Proteins of this kind have been shown to be effective at preventing blood clotting without causing excessive bleeding. The protein can be used in blood collection tubes to aid the isolation of plasma from the blood, to prevent thrombosis which may be linked to the rupture of an atherosclerotic plaque, acute myocardial infarction, angina, thrombolytic therapy, percutaneous transluminal coronary angioplasty, disseminated intravascular coagulopathy, infection, instance, the antibodies can be raised in order to detect infection by nematodes (the coding sequence can also be used for this) or as diagnostic tests. The protein can also be used as a vaccine against
                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                              10;
                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                Nematode extracted anticoagulant protein; NAP; anticoagulant; serine protease inhibitor; NAP domain; factor VIIa/TF.
                                                                                                                                                                                                                                                                                                             12 CPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCV-----CRLGYLRNKKKVCV
                                                                                                                                                                                                                                                                             19; Indels
                                                                                                                                                                                                                                                21.0%; Score 82; DB 21; Length 61; 30.9%; Pred. No. 0.37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mature nematode extracted anticoagulant protein HpoNAP5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , Laroche YR;
Stanssens PEH;
                                                                                                                                                                                                                                                                              9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bergum PW, Gansemans YGJ, Jespers LS,
Lauwereys MJ, Messens JHL, Moyle M, S
                                                                                                                                                                                                                                                                                                                                                                                                                    AAY30433 standard; Protein; 58 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96US-0634641.
94US-0326110.
95US-0461965.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96US-0634641.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95US-0465380
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95US-0486399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95WO-US13231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-NOV-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Heligmosomoides polygyrus.
                                                                                                                                                                                                                                                           Local Similarity 30.9 tes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CORV-) CORVAS INT INC
                                                                                                                                                                                       nematode parasites.
                                                                                                                                                                                                                   61 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USS955294-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUN-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vlasuk GP;
                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY30433;
                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4
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ŏ ద The present sequence represents a nematode extracted anticoagulant protein (NAP). The protein has activity as an anticoagulant and/or serine protease inhibitor. The protein contains at least one NAP domain which has selective inhibitory activity for factor VIIa/TF. The specification describes a method for screening an isolated protein at least one domain

Screening an isolated protein for Nematode-extracted Anticoagulant Protein domains

WPI; 1999-539569/45.

Disclosure; Columns 143-144; 197pp; English.

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determining the time to clotting effected by a concentration of the isolated protein in an ex vivo prothrombin time (PT) assay and an ex vivo prothrombin time (PT) assay and an ex vivo prothrombin time (PT) assay and an ex vivo protongation of clotting effected by the isolated protein in each of the PT and aPTT assay, with respect to a baseline clotting value for each assay, where protongation of clotting is calculated as fold elevation of clotting time relative to a baseline clotting value, where a doubling of clotting time relative to a baseline oldting value, where a calculating a PT to aPTT prolongation ratio, where a ratio at least one is indicative of factor VIIa/TF inhibitory activity. The method is useful for determining if a protein has factor VIIa/TF inhibitory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        an aqueous medium containing at least one dissolved or suspended metal. The transgenic algae are used for the selective separation of metals, particularly the separation of precious and desirable metals such as gold and uranium, from other metals such as cadnium, zinc and copper. The method can be used to facilitate the selective recovery of precious and rare metals from mineral sources where aqueous media can be used, such as in natural surface water flows, ground water and where water may be introduced. The method is suitable for well-drilling, soil and water remediation arts, mining fields, and industrial engineering. The present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       genus Chlamydomonas comprising reproductive genetic material comprising a nucleotide sequence capable of expressing chicken type I Metallothionein. Also described is a method of removing metal from .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Metallothionein; metal recovery; remediation; heavy metal; precious metal; phytochelatin; green algae; Chlamydomonas reinhardtii.
                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a transgenic algal cell (I) of the
                                                                                                                                                                                                                                                                                                                                                                                                      12 CPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                CGPNEEYTECGTPCEPKCNEPMPDICTLNCIVNVCQCKPGFKRGPKGCVAPGPGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel method for metal recovery, remediation and separation
                                                                                                                                                                                                                                                                                                                        17.4%; Score 68; DB 20; Length 58; 25.5%; Pred. No. 8.7;
                                                                                                                                                                                                                                                                                                                                                              34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Trout metallothionein Class I amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 6; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (OHIS ) UNIV OHIO STATE RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY57812 standard; protein; 59 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US12007.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sayre RT, Traina SJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-086646/07.
                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                 58 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9960838-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-DEC-1999
                                                                                                                                                                                                                                             activity.
                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY57812;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Salmo sp.
                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                               'n
                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
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ABN79587 represent cDNAs encoding them. The invention also encompasses polypeptides at least 80% identical to the ORF1-ORF4534 (collectively) referred to as ORFX) proteins, polynucleotides at least 85% identical to the ORFX nucleic acid sequences, vectors and host cells comprising ORFX polynucleotides, the recombinant production of ORFX proteins, antibodies specific for ORFX proteins, methods of detecting ORFX polynucleotides, and activity, and methods of screening individuals for a predisposition to an ORFX-associated disorder. The ORFX proteins of the invention have a wide range of biological activities, such as cytokine, cell proliferation, cell differentiation, immune modulation, haematopolesis regulation,
                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; ORF; open reading frame; ORFX; drug screening; diagnosis; disease monitoring; cytokine; cell proliferation; cell differentiation; immune modulation; hasmatopolesis regulation; tissue growth; angiogenesis; activin; inhibin; chemotactic; chemokinetic; haemostatic; thrombolytic; tumour inhibition; bodily characteristic; fertility; behaviour; cancer; proliferative disorder; neurological disorder; cardiovascular disease; immune system disorder; organ transplantation; tissue growth disorder; tissue regeneration disorder; diabetes mellitus; hypothyroidism; cholesterol ester storage disease; infection; vulnerary; wasotropic; antipsoriatic; antidiabetic; cytostatic; noctropic; neuroprotective; antidiabetic; cytostatic; noctropic; cardiant; hypotensive; antithyroid; antinflammatory; immunomodulator; dermatological; analgesic; virucide; antibacterial; fungicide.
                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and disorders related to organ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequences ABP31028-ABP35561 represent 4534 novel human proteins
                                                                                               Indels 15;
                                                                                                                                  7 GGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                          15 GGSCKC-SNCACTSCKKSCCPCCPSDCK-----CASGCVC-----KGKTC 53
                                                          Length 59;
                                                          DB 21;
                                                                                               18;
                                       Score 63.5; DE NO. 25;
                                                                            Pred. No. 25;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                             Human ORF1805 protein, SEQ ID NO:3610.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 10; Page 1162; 2508pp; English.
                                                                                                                                                                                                                                                                         ABP32832 standard; Protein; 59 AA.
                                                        16.2%;
35.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-MAY-2001; 2001WO-US17076.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-MAY-2000; 2000US-206690P.
                                                                                                                                                                                                                                                                                                                                                      09-JUL-2002 (first entry)
                                                                                             19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Leach MD, Shimkets RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-106200/14.
N-PSDB; ABN76858.
                                                                        Similarity
                59 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     transplantation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200190366-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                 ABP32832;
                Sequence
                                                     Query Match
                                                                            Best Loca
Matches
                                                                                                                                                                                                                                      RESULT 6
                                                                                                                                                                                                                                                         ABP32832
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tissue growth, angiogenesis, activin or inhibin activity, chemotactic/
chemokinetic activity, haemostatic activity, thrombolytic activity,
receptor/ligand, antiinflammatory activity, thrombolytic activity,
cand antiinfective activity, and may also be involved in the determination
of bodily characteristics, fertility and behaviour. ORFX proteins,
concleid acids and antibodies may be used in the treatment of cancers,
corpus transplantation as polities and Alzheimer's disease,
cardiovascular diseases, immune system disorders related to
corpus transplantation, disorders of tissue growth and regeneration,
diseases such as diabetes mellitus, hypothyroidism, and cholesterol ester
corpus transplantation, disorders of tissue growth and regeneration,
diseases such as diabetes mellitus, hypothyroidism, and cholesterial,
corpus transplantation diseases caused by viral, bacterial,
cingal and other pathogens. ORFX uncleic acids may also be used as a
source of primers and probes, in the detection of ORFX genomic sequences
corpus or transcripts, in the identification and cloning of homologous
corpus research of diagnosis, and in forensic biology. The ORFX
nucleic acids may additionally be used to produce transgenic animals
content and undersate specific antibodies, which are useful in the
immunogens to generate specific antibodies, which are useful in the
corpus diagnosis, treatment and monitoring of ORFX-associated diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A recombinant streptavidin-metallothionein chimeric protein is useful to add or remove heavy metal ions into biotin-containing biological material, particularly for tumour imaging, radiotherapy, and DNA or protein labeling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Streptavidin; metallothionein; heavy metal ion; tumour cell imaging;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 23; Length 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25 CORFCPNV---VPKPLCIKICAPGCVCRLGYLRNKKVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Consensus sequence of mammalian metallothionein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 63.5; DE
Pred. No. 25;
7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            biotin; radiotherapy; mass spectrometry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30..62
/note= "alpha domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "beta domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABB77804 standard; Protein; 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                       16.2%;
28.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91US-0780717.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-SEP-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 28.99
Matches 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-488386/52.
                                                                                                                                                                                                                                                                                                                                                                                                                     59 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US6391590-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-OCT-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-OCT-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB77804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mammalia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sano T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 7
ABB77804
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AAB60286
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                       22 × 8
                                                                                                                                                                                                                                                                                                                                                            δλ
                                                                                                                                                                                chimeric protein. This protein is produced by introducing into a host cell nucleic acid encoding a bifunctional fusion protein having a streptavidin and a metallothionein moiety, and incubating the cell to express the fusion protein. The streptavidin moiety consists of residues 16-133 of mature streptavidin. The chimeric protein is used to incorporate heavy metal ions into biological materials containing biotin, or to remove heavy metal lons from the biological material. Specific uses include loading cancerous tissue with heavy metal ions for imaging of tumour cells and radiotherapy, and labeling DNA and proteins for detection on gels or blots by surface scanning mass spectrometry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated polynucleotide encoding a polypeptide which is related to potato snakin antimicrobial protein and GASA4 or GASA5 to GASTI homologues, which is referred to as lysine- and cysteine- rich peptides (KCP)-like polypeptide, having a nucleotide sequence from 36 sequences of defined base pairs, given in the specification. A recombinant expression cassette comprising the isolated polynucleotide of the invention is useful for modulating the level of (KCP)-like polypeptides in a plant cell, where the level of (KCP)-like polypeptides is increased, and disease resistance is enhanced. This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antimicrobial; transgenic; plant; potato snakin antimicrobial protein; GASA4; GASA5; GAST1 homologue; lysine- and cysteine- rich peptide; KCP-like polypeptide; modulating; disease resistance.
                                                                                                                     used to produce chimeric proteins of the invention. The specification describes a recombinant bifunctional streptavidin-metallothionein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polynucleotide encoding lysine and cysteine-rich peptides-like polypeptide useful for modulating the polypeptide level in a plant cell, enhancing disease resistance .
                                                                                  present sequence represents mammalian metallothionein. It is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16.0%; Score 62.5; DB 23; Length 62; 37.3%; Pred. No. 32; Live 2; Mismatches 23; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 GGSCTCAGSCKCKECKCTS-CKKSCCSCCP----VGCAK-CAOGCVCKAG 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Arabidopsis thaliana KCP-like protein, SEQ ID NO 76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 154; 163pp; English.
Disclosure; Column 3; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA021321 standard; Protein; 63 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (PION-) PIONEER HI-BRED INT INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Simmons CR, Navarro Acevedo PA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-SEP-2000; 2000US-232569P.
11-SEP-2001; 2001US-0950933.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-SEP-2001; 2001WO-US28429.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 37.3
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Arabidopsis thaliana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-425842/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200222821-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AA021321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Age-related gene regulation, liver-specific, gene expression, human factor IX, hFIX; AE5'; AE3'; age-regulatable expression construct, antisense therapy; gene therapy; thrombosis; cardiovascular disease; diabetes; Alzheimer's disease; Parkinson's disease; cancer; osteoporosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                can independently exert effects on hirs man in instruct, uner with AES' acting to stabilise herx mRNA, and AB3' acting to increase herx mRNA levels, over time. AES' also directs liver-specific expression. The hPC gene age-related regulatory sequence is found in the 5' UTR (AAF54081), and contains two PEA-3 (polyoma virus activator 3) elements 5'.GAGGAAA-3' and 5'-CAGGAAG-3'. The age-related regulatory sequences of the invention, along with their homologues, variants and fragments, may be used in the construction of recombinant expression vectors for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           expression in an age-related manner and/or in a liver-specific manner. The invention identifies regions of the human factor IX (hFIX) gene, and a region of the human protein C (hFO) gene, which are age-related regulatory sequences. The hFIX age-related regulatory sequences are designated AES' (AAF$4016) and AE3' (AAF$4017) and are found in the 5' UTR (at position 2164-2165 of AAF$4018) and 3' UTR (at position 2164-2185 of AAF$4018) respectively. These elements act synergistically to increase hFIX levels over the lifespan of an individual; however, they
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expression of a desired sequence in an age-related fashion in a host cell. Preferred target genes for expression in such age-regulatable expression vectors include those encoding proteins involved in blood coaqulation (e.g., the pro-coagulants factor IX and factor VIII, and the
sequence represents a protein relating to the KCP-like proteins of the
                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to nucleic acid sequences which requlate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New regulatory elements that control age-related gene expression, useful in gene therapy and for reducing Factor IX expression
                                                                                                                                                     J.
                                                                                                          DB 23; Length 63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human factor IX (hFIX) exon-encoded fragment, SEQ ID NO:9.
                                                                                                                                                4; Mismatches 19; Indels
                                                                                                                                                                                                                    20 RCDGRCQRFCPNV-VPKP---LCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                          Score 62.5; I
Pred. No. 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Fig 8C; 225pp; English,
                                                                                                                                                                                                                                                                                                                                         AAB60286 standard; Protein; 43 AA
                                                                                                       16.0%;
37.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-JUN-2000; 2000WO-US15728.
                                                                                              Query Match 16.0%
Best Local Similarity 37.8%
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                          30-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      osteoarthritis; dementia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UNMI ) UNIV MICHIGAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kurachi K, Kurachi S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001-061708/07.
                                                            63 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAF54018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200075279-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-DEC-2000.
                      invention.
                                                               Sequence
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5;
                                                                                                                          liver-specific expression of target genes. Age-regulatable constructs may be used in the treatment of such age-related conditions such as thrombosis, cardiovascular disease, diabetes, Alzheimer's disease, Parkinson's disease, cancer, osteoporosis, osteoarthritis and dementia. Specifically, they may be used to express factor IX antisense mRNA in the treatment of thrombotic conditions associated with the natural
anti-coagulants protein C and antithrombin III), human alpha-1-antitrypsin, PEA-3 protein and reporter proteins such as luciferase. Preferred promoters for use in such age-regulatable expression vectors include the human factor IX promoter, the T7 promoter, the T3 promoter and the SP6 promoter. The expression vectors of the invention may be used in gene therapy to provide age-related and/or
                                                                                                                                                                                                                                                    age-related rise in factor IX expression. Transgenic cells or animals that contain vectors of the invention are useful as models of these diseases, in screening for potential therapeutic agents and for studying normal processes such as ageing and gene expression. Fragments and homologues of age-related regulatory sequences, are useful as probes to detect, isolate or identify other such sequences in samples. The present sequence represents a fragment of hFIX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genus Chlamydomonas comprising reproductive genetic material comprising a nucleotide sequence capable of expressing chicken type I wetallothionein. Also described is a machod of removing metal from an aqueous medium containing at least one dissolved or suspended metal. The transgenic algae are used for the selective separation of metals, particularly the separation of precious and desirable metals such as gold and uranium, from other metals such as cadmium, zinc and copper. The method can be used to facilitate the selective recovery of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            precious metal; phytochelatin; green algae; Chlamydomonas reinhardtii.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a transgenic algal cell (I) of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel method for metal recovery, remediation and separation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Metallothionein; metal recovery; remediation; heavy metal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 22; Length 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rabbit liver metallothionein Class II amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22 DGRCQRFCPNVVPKPLCIKICAPGCVCRLGY-LRNKKVCVP 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 NGRCEQFCKNSADNKVV-----CSCTEGYRLAENQKSCEP 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (OHIS ) UNIV OHIO STATE RES FOUND.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY57822 standard; protein; 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15.9%;
33.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0087374.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US12007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-MAR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oryctolagus cuniculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Traina SJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-086646/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                 43 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9960838-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sayre RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                      Sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY57822;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
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               be used, such as in natural surface water flows, ground water and where water may be introduced. The method is suitable for well-drilling, soil and water remediation arts, mining fields, and industrial engineering. The present sequence represents a Class II metallothionein given in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Isolated cDNAs encoding TANGO 244, TANGO 246, TANGO 275, TANGO 300 and MANGO 245 proteins, useful in the treatment of inflammatory diseases (e.g. idiopathic ulcerative colitis), tumors, renal disorders and liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to cDNAs encoding TANGO 244,
TANGO 246, TANGO 275, TANGO 300 and MANGO 245 proteins.
The nucleic acids, proteins and protein modulators are useful for treating colonic disorders, inflammatory diseases, tumors, renal disorders, liver disorders, lung disorders, autoimmune diseases, allergic diseases, cardiovascular diseases, brain disorders, degenerative diseases placental, pancreatic, skeletal and muscle
precious and rare metals from mineral sources where aqueous media can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TANGO; MANGO; colon; inflammation; tumor; renal; liver; lung; autoimmune; allergy; cardiovascular; brain; degenerative; placental;
                                                                                                                                                                               12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.7%; Score 61.5; DB 22; Length 67; 31.7%; Pred. No. 43;
                                                                                                                                          Score 62; DB 21; Length 61; Pred. No. 36;
                                                                                                                                                                               10; Indels
                                                                                                                                                                                                                                25 KCTS-----CKKSCCSCCP-----PGCAK-CAQGCICK 51
                                                                                                                                                                                                            11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fraser CC, Sharp JD;
                                                                                                                                                                               2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Fig 13; 262pp; English.
                                                                                                                                                                                                                                                                                                                         AAB61455 standard; protein; 67 AA
                                                                                                                                                                                                                                                                                                                                                                                                                      Metallothionein domain consensus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     autoimmune; allergy; cardiova:
pancreatic; skeletal; muscle.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MILL-)'MILLENNIUM PHARM INC.
                                                                                                                                               15.9%;
38.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JUN-2000; 2000WO-US18184.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0342687.
                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disorders (e.g. jaundice)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Barnes TM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19; Conservative
                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-050127/06.
                                                                                                                                                            Local Similarity
es 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67 AA;
                                                                                                                 61 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200100672-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Holtzman DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                         04-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-JAN-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sednence
                                                                                                                                                                                                                                                                                                                                                           AAB61455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                  Sequence
                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local
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                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                             RESULT 11
                                                                                                                                                                                                                                                                                                               AAB61455
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Receptor; catalytic domain; Factor IXa; Factor Xa; tissue factor; angina;
                                                                                                                                                                                                                                                                                                                                                          blood clotting disorder; thrombosis; restenosis; myocardial infarction; reclosure; cerebrovascular disease; hypercoagulability; anticoagulant; peripheral arterial occlusive disease; pulmonary embolism; cyclic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of interacting with an internal receptor in the catalytic domain of Factor IXa (FIXa) or Factor X (FX) defined by the residues I1e290, A1a291, Asp292, TYL294, G1U374 and Phe378 of FIXa, and Leu3300, Pro301, G1U302, TRP305, A1a306, Ly2385 and Phe389 of FXa, or the ligand defined by residues Cys95-Cys99 of FIXa or Cys96-Cys100 of FXa. The compounds can be used to prevent the formation of a functional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptides AAY04625-Y04647 represent claimed compounds which are capable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FVIIIa/FIXa or FVIIIa/FXa complex, so can be used to combat or preven blood clotting disorders, e.g. thrombosis (particularly vascular thrombosis or deep vein thrombosis, acute myocardial infarction, restenosis, angina, reclosure, cerebrovascular disease, peripheral arterial occlusive disease, hypercoagulability or pulmonary embolism. They can also be used to prevent the occurrence of blood clotting disorders caused by e.g. grafting surgery, vessel wall potency restoration or sepsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 34.1%; Pred. No. 36;
Matches 14; Conservative 4; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "Factor VIIIa interacting domain"
                                                                                                                                                                                                                                                               Factor IXa catalytic and interacting domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13..29
14..16
/note= "catalytic domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                        AAY04648 standard; peptide; 47 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Fig 1; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97GB-0019157.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98WO-GB02700.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fischer PM, Sakariassen KS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MATT/) MATTHEWS D P. (NYCO-) NYCOMED IMAGING AS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New anticoagulant compounds
                                                                                                                                                                                         22-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W09913062-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-MAR-1999.
                                                                                                                              AAY04648;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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RESULT 12
                            AAY04648
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This internation, number sective protections have accivities passes of activities are:

and cells the genes are expressed in Examples of activities are:

controlled the genes are expressed in Examples of activities are:

controlled the genes are expressed in Examples of activities are:

controlled the genes are expressed in the protective; antiproliferative;

controlled the genes are expressed in the protective; and protective; antibacterial; virucides and polypeptides can be used to controlled. The polymorleotides and polypeptides can be used to controlled the polypeptides of the prevent. The polymorleotides and polypeptides can be used to callowascular abbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Disorders which are diagnosed or treated include catterimmune diseases, hyperproliferative disorders, nervous system disorders, infections caused by bacteria, viruses and fungi and ocular calsorders. Infections caused by bacteria, viruses and fungi and ocular calsorders and so be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of confirmance of polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities. AAC79790 to AAC79798 and increase or decrease storage capabilities. AAC79790 to the present
                                                                                                                                                                                                                        Human; secreted protein; diagnosis; immunosuppressive; antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective; notropic; neuroprotective; antibacterial; virucide; funglcide; ophthalmological; gene therapy; autoimmune disease; infection; hyperproliferative disorder; cardiovascular disorder; angiogenesis; cerebrovascular disorder; nervous system disorder; ocular disorder; wound healing; skin aging; food additive; preservative.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human secreted proteins given in AAB44762 to AAB44811. AAB44812 to AAB44829 represent human secreted polypeptide sequences and proteins homologous to them, which are used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention. Human secreted proteins have activities based on the tissues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid encoding human secreted proteins, used to treat, prevent, ameliorate or diagnose medical conditions such as cancer, and autoimmune diseases .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The polynucleotide sequences given in AAC79799 to AAC79848 encode the
                                                                                                                                                                               Human secreted protein sequence encoded by gene 17 SEQ ID NO:77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 61; DB 21; Length 56; Pred. No. 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Komatsoulis G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 11; Page 362; 391pp; English.
                                           AAB44778 standard; Protein; 56 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JAN-2000; 2000US-0174877.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15.6%;
29.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-MAR-2000; 2000WO-US07726
                                                                                                                               12-FEB-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rosen CA, Ruben SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-602355/57
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; AAC79815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               56 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200058336-A1
                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-1999;
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                                                                                         AAB44778;
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RESULT 13
                        AAB44778
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Gaps

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Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic polypeptides. The proteins and their associated DNA sequences are used in the treatment, prevention and diagnosis of medical conditions caused by eacnes. The disorders include SAPHO syndrome (synovitis, acne, pustubosis, hypertosis and osteomyelitis), uveitis and endophthalmitis. P. acnes is also involved in infections of bone, joints and the central nervous system, however it is particularly involved in the inflammatory lesions associated with acne vulgaris. A method for detecting the presence or absence of P. acnes in a patient comprises contacting a sample with a binding agent that binds to the proteins of the invention of polypeptides may be used as antigens in the production of antibodies specific for P. acnes proteins. These antibodies can be used to convergulate expression and activity of P. acnes polypeptides and therefore treat P. acnes infections. The antibodies may also be used as diagnostic agents for determining P. acnes polypeptides and therefore treat P. acnes infections. The antibodies may also be used as diagnostic agents for determining P. acnes proteins by acnes infections. The antibodies may also be used as clayme linked immunosorbent assay (ELISA).

Specification, but was obtained in electronic format directly from WIPO polyperic and patent directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis; uveitis; endophthalmitis; bone; joint; central nervous system; ELISA; inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay; dermatological; osteopathic; neuroprotectant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Propionibacterium acnes polypeptides and nucleic acids useful for vaccinating against and diagnosing infections, especially useful for
    Gaps
12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Skeiky YAW, Persing DH, Mitcham JL, Wang SS, Bhatia A;
L'maisonneuve J, Zhang Y, Jen S, Carter D;
18; Indels
                                                                                    21 CDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG 67
                                                                                                                                    4 CVQACVHMC-----CVHVCASVHVCECAYVH-----CVRECACG 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Propionibacterium acnes immunogenic protein #6159.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 at ftp.wipo.int/pub/published_pct_sequences.
    3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; SEQ ID No 6458; 1069pp; English.
                                                                                                                                                                                                                                                                                                                                                                               AAU45263 standard; Protein; 66 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-APR-2000; 2000US-199047P.
02-JUN-2000; 2000US-208841P.
07-JUL-2000; 2000US-216747P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-APR-2001; 2001WO-US12865.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-FEB-2002 (first entry)
        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rreating acne vulgaris -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Propionibacterium acnes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-616774/71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    maisonneuve J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; AAS59525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200181581-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-2001
        14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAU45263;
        Matches
                                                                                                                                                                                                                                                                                                    RESULT 14
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DB 22; Length 66; 48;

Score 61; Pred. No.

15.6%; 31.8%;

Query Match Best Local Similarity

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4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis; hyperproliferative disorder; psoriasis; benign tumour; haemorrhage; degenerative disorder; osteoarthritis; neurodegenerative disorder; cardiovascular disease; diabetes mellitus; systemic lupus erythematosus; hypertension; hypothyroidism; cholesterol ester storage disease; immune disorder; infectious disease; autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 lupus erythematosus, hypertension, hypothyroidism, cholesterol ester storage disease, various immune deficiencies and disorders, infectious diseases, autoimmune disorders such as multiple sclerosis, rheumatoid arthritis, autoimmune thyroiditis, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. OREX proteins are also useful for treating burns, incisions, ulcers, for treating osteoporosis, bone degenerative disorders, or periodontal disease, and for gut
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  transplantation, cardiovascular diseases, diabetes mellitus, systemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes substantially purified human proteins
    Gaps
                                            2 GFGGLGGRGKC---PSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKK 58
                                                                  Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and autoimmune disorders
12;
    27; Indels
    6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                        Human ORFX protein sequence SEQ ID NO:2710.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID 2710; 1037pp; English.
                                                                                                                                                                                                                                                                               ABP01364 standard; Protein; 60 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-MAY-2001; 2001WO-US10836.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAY-2000; 2000US-206132P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-228716P.
                                                                                                                                                                                                                                                                                                                                                                    25-JUN-2002 (first entry)
    21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shimkets RA, Leach MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-106308/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 myasthenia gravis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; ABN17116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200192523-A2
                                                                                                                                 59 VCVPRS 64
                                                                                                                                                                         58 PCQPPS 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-DEC-2001
                                                                                                                                                                                                                                                                                                                          ABP01364;
      Matches
                                                                                                                                                                                                                                         RESULT 15
                                                                                                                                                                                                                                                                ABP01364
                                                                                                                                                                                                                                                                                                                                              qq
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CC reperfusion or regeneration and treatment of lung or liver fibrosis,
C reperfusion injury in various tissues and conditions resulting from
CC N.B. The Sequence data for this patent did not form part of the printed
CC Specification, but was obtained in electronic format directly from WIPO
XX
SQ sequence 60 AA;

Query Match
Best Local Similarity 35.5%; Pred. No. 56;
Matches '11; Conservative 3; Mismatches 17; Indels 0; Gaps 0;
Qy 36 PLCIKICAPGCVCRLGYLRNKKKVCVPRSKC 66
| | | | | | | | | | | | | | | |
Db 3 PTCACVCKPICATCACVCVLLSXVCVCIPMCAC 33
Search completed: February 26, 2003, 15:10:41
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GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

February 26, 2003, 15:12:44; Search time 13 Seconds Run on:

(without alignments)
194.412 Million cell updates/sec

Perfect score:

US-09-506-978-1 391 1 GGFGGLGGRCRCPSNBIFSR......CRLGYLRNKKVCVPRSKCG Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

Total number of hits satisfying chosen parameters: 174566 segs, 37721826 residues Searched:

Minimum DB seq length: 0 Maximum DB seq length: 67

Maximum Match 100% Listing first 45 summaries Post-processing: Minimum Match 0%

Database

Published_Applications_AA:*

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/cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*

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/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*/cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*/cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*/cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Sequence 11, Appl Sequence 12, Appl Sequence 11, Appl Sequence 34995, A Sequence 73, Appl Sequence 1773, Ap Sequence 1792, Ap Sequence 1792, Ap Sequence 115, App Sequence 120, App Sequence 47, Appl Sequence 11, Appl Sequence 11, Appl Sequence 11, Appl Sequence 37621, A Sequence 2, Appli Sequence 8, Appli Sequence 59, Appl Sequence 76, Appl Description US-09-796-692-1773 US-09-796-692-1792 US-09-796-692-2056 US-09-864-761-37621 US-09-865-578-2 US-09-865-578-8 US-09-865-578-11 US-09-864-761-34995 US-09-917-340-73 US-09-950-933A-76 US-09-981-353-115 US-09-981-353-120 US-09-847-185-47 US-10-136-573A-11 US-09-877-665-11 US-10-215-862-11 10 US-09-790-264-59 9 US-09-950-933A-76 US-09-817-647-11 US-10-201-945-12 SUMMARIES 100 100 100 100 100 100 100 Query Match Length DB Score 48.5 48.5 48.5 . 9 Result

Sequence 2465, Ap Sequence 68, Appl Sequence 6, Appli Sequence 47829, A	Sequence 4, Appli Sequence 10, Appl Sequence 901, Appl Sequence 4, Appli	40 0 0 0	Sequence 2, Appli Sequence 2, Appli Sequence 11, Appl Sequence 11, Appl Sequence 12, Appl	Sequence 5, Appli Sequence 6, Appli Sequence 52, Appl Sequence 75, Appl Sequence 12, Appl Sequence 13, Appl Sequence 13, Appl
9 U 10 10	10 US-09-865-578-4 10 US-09-827-948-10 10 US-09-925-297-90 10 US-09-929-481-4	0,000	9 US-10-039-119A 9 US-10-138-158- 9 US-10-138-158- 9 US-10-138-158- 10 US-09-299-473	51 9 US-09-741-106-5 51 10 US-09-827-948-6 55 9 US-09-909-5678-52 63 9 US-09-950-933A-75 66 10 US-09-965-703-42 45 9 US-10-136-573A-13 45 9 US-09-877-665-13
3.5 48 48 11 48 11	47.5 1 47 1 47 1 47 1 7 47 1	66 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	46 46 111. 46 111. 46 111.	39 45.5 11.6 40 45.5 11.6 41 45.5 11.6 42 45.5 11.6 43 45.5 11.6 44 45 11.5 45 11.5

ALIGNMENTS

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GENERAL NO. SOLOUZOUSOUSANTON:
APPLICANT: HOLTZMAN, DOUGLAS A.
APPLICANT: GOOGGAIL, ANGTEW D.J.
TITLE OF INVENTION: PROCHASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
TITLE OF INVENTION: PROCHASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
TITLE OF INVENTION: PROCHASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
TITLE OF INVENTION: PROCHASTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
TITLE OF INVENTION: USES
FILE REFERENCE: 0734-322001
CURRENT APPLICATION NUMBER: US 09/065,661
PRIOR APPLICATION NUMBER: US 09/298,531
PRIOR FILING DATE: 1999-04-23
PRIOR FILING DATE: 1999-07-29
PRIOR PRIOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 68 SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                        Sequence 59, Application US/09790264 Patent No. US200208508A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-09-790-264-59
RESULT 1
US-09-790-264-59
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LENGTH: 60
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10 GKCPSNEIFSRCDGRCORFCPNVVPKPLCIKICAPGC--VCR 49 = = ŏ

Wed Feb 26 15:20:41 2003

Gaps

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APPLICANT: SOO HOO, WILLIAM
TITLE OF INVENTION: MEMBRANE-BOUND CYTOKINE COMPOSITIONS
COMPRISING GM-CSF AND METHODS OF MODULATING AN IMMUNE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19;
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                                                                                                                                                                                                                                                                                                                        Length 61;
                                                                                                                                                                                                                                                 CTHER INFORMATION: Incyte ID No. US20020160382A1 2757583CD1 US-09-981-353-120
                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: FLORPY disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: 0S/09/847,185
FILING DATE: 01-May-2001
CLASSIFICATION: <u >Unknown></u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 GFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVC 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: CAMPBELL & FLORES, LLP
STREET: 4370 La Jolla Village Drive, Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                   10 GKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: P-IM 2442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESPONSE USING SAME
                                                                                                                                                                                                                                                                                                                           14.5%; Score 56.5; I 37.5%; Pred. No. 33;
                                                                                                                                                                                                                                                                                                                                                                       5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 47:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 09/201,931
                   CURRENT APPLICATION NUMBER: US/09/981,353
CURRENT FILING DATE: 2001-10-11
NUMBER OF SEQ ID NOS: 194
SOFTWARE: PERL Program
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Campbell, Cathryn A. REGISTRATION NUMBER: 31,815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: (619)535-901
TELEFAX: (619)535-8949
INFORMATION FOR SEQ ID NO: 47:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 47, Application US/09847185; Patent No. US20020076392A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: San Diego
STATE: California
COUNTRY: United States
ZIP: 92121
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 38 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                         Conservative
FILE REFERENCE: PA-0038 US
                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                     NAME/KEY: misc_feature
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Best Local Similarity
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                                                                                                                SEQ ID NO 120
LENGTH: 61
                                                                                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                             APPLICANT: Navarro, Pedro
TITLE OF INVENTION: Antimicrobial Peptides and Methods of
TITLE OF INVENTION: Use
TITLE REFERENCE: 35718/228472
CURRENT APPLICATION NUMBER: US/09/950,933A
CURRENT FILING DATE: 2001-09-11
PRIOR APPLICATION NUMBER: 60/232,569
PRIOR APPLICATION NUMBER: 60/232,569
PRIOR FILING DATE: 2000-09-13
NUMBER OF SEQ ID NOS: 99
SOFTWARE: FASELSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 GGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 RCDGRCQRFCPNV-VPKP---LCIKICAPGCVCRLGYLRNKKKVC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 OCGGQCTRRCSNTKYHKPCMFFCQKCCAK-CLCVPPGTYGNKQVC 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Jones, "Jaid A. TITLE OF INVENTION: GRNES EXPRESSED IN COLON CANCER FILE REFERENCE: PA-0038 US CURRENT APPLICATION UNMER: US/09/981,353 CURRENT FILING DATE: 2001-10-11 NUMBER OF SEO ID NOS: 194 SOFTWARE: PERL Program SEO ID NO 115 LENGTH: 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lasek, Amy W.
APPLICANT: Jones, David A.
TITLE OF INVENTION: GENES EXPRESSED IN COLON CANCER
       17 GKCPKNP--PRSIGTCVELCSGDQSCPNIQKCCSNGCGHVCK 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 14.7%; Score 57.5; DB 9; Local Similarity 32.6%; Pred. No. 26; nes 15; Conservative 6; Mismatches 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 115, Application US/09981353; Patent No. US20020160382A1; GENERAL INFORMATION:
                                                                                                                       Sequence 76, Application US/09950933A Patent No. US20020166141A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         / Match 16.0%;
Local Similarity 37.8%;
nes 17; Conservative '
                                                                                                                                                                                            APPLICANT: Simmons, Carl R.
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                                                                                                                                                                        GENERAL INFORMATION:
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                                                                                                    US-09-950-933A-76
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 76
LENGTH: 63
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                                                                                RESULT 2
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                                                                                                Sequence 11, Application US/10136573A
Sequence 11, Application US/10136573A
Patent NO. US2020161200A1
GENERAL INFORMATION:
APPLICANT: Godowski, Paul J.
APPLICANT: Anny Dong Xiao
TITLE OF INVENTION: ExbB Receptor-Specific Neuregulin Related Ligands and TITLE OF INVENTION: Uses Therefor FILE REFERENCE: P1084RIC.
FILE REFERENCE: P1084RIC.
CURRENT APPLICATION NUMBER: US/10/136,573A
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TITLE OF INVENTION: ErbB Receptor-Specific Neuregulin Related
Ligands and Uses Therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7;
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ZIP: 94080

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Winpatin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match
14.2%; Score 55.5; DB 9;
Best Local Similarity 35.9%; Pred. No. 31;
Matches 14; Conservative 5; Mismatches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18 FSRCDGRCQRFCPNVVPKPLCIKICA---PGCVCRLGYL 53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/877,665
FILING DATE: 08-Jun-2001
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/109,206
FILING DATE: 30-Jun-1998
                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 09/480, 977
PRIOR FILING DATE: 2000-01-11
PRIOR APPLICATION NUMBER: US 08/899, 437
PRIOR FILING DATE: 1997-07-24
PRIOR APPLICATION NUMBER: US 60/052, 019
PRIOR FILING DATE: 1997-07-09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : Sequence 11, Application US/09877665
; Patent No. US20020164680A1
; GENERAL INFORMATION:
            1 GCGGAGGGCC-----CTAGC---
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SEQ ID NO 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-136-573A-11
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APPLICANT: Godowski, Paul J.
APPLICANT: Mark, Melanie Rose
APPLICANT: Zhaq, Dong Xiao
TITLE OF INVENTION: ExbB Receptor-Specific Neuregulin Related Ligands and
TITLE OF INVENTION: Uses Therefor
FILE REFERENCE: P1084RID2C1
CURRENT APPLICATION NUMBER: US/10/215,862
CURRENT FILING DATE: 1002-09-24
PRIOR PLICATION NUMBER: US 09/126,663
PRIOR FILING DATE: 1998-07-30
PRIOR PLICATION NUMBER: US 08/899,437
PRIOR PLICATION NUMBER: US 08/899,437
PRIOR PLICATION NUMBER: US 06/052,019
PRIOR PLICATION NUMBER: US 60/052,019
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                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                     Query Match
14.2%; Score 55.5; DB 9; Length 45;
Best Local Similarity 35.9%; Pred. No. 31;
Matches 14; Conservative 5; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14.2%; Score 55.5; DB 9; Length 45; 35.9%; Pred. No. 31;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 FSRCDGRCQRFCPNVVPKPLCIKICA---PGCVCRLGYL 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 FSRCPKQYKHYC----IKGRCRFVVAEQTPSCVCDEGYI 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 FSRCPKQYKHYC----IKGRCRFVVAEQTPSCVCDEGYI 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 FSRCDGRCQRFCPNVVPKPLCIKICA---PGCVCRLGYL 53
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                                                                                                                                                                                                                                                                             SEQUENCE DESCRIPTION: SEQ ID NO: 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: I DNA WAY
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-215-862-11
; Sequence 11, Application US/10215862
; Publication No. US20030036166A1
; GENERAL INFORMATION:
; APPLICANT: Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 11, Application US/09817647
Patent No. US20020082229A1
GENERAL INFORMATION:
                                                                       LENGTH: 45 amino acids TYPE: Amino Acid
                                                                                                                                                                                                                          IDENTIFICATION METHOD:
TELEFAX: 650/952-9881
                     INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                          NAME/KEY: hBTC.efg
                                                                                                                                                                                                                                                     OTHER INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 23
                                                                                                                       TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
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Matches 14; Conserv
                                                                                                                                                                                                     LOCATION:
                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-817-647-11
                                                                                                                                                                                                                                                                                                  US-09-877-665-11
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LENGTH: 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Meisener, Paul S.
Fuldner, Rebecca A.
Adams, Mark D.
TITLE OF INVENTION: Transforming Growth Factor Alpha HI
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/201,945
FILING DATE: 25-Jul-2002
CLASSIFICATION: <UNKNOWN>
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: 1EM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/817,647
FILING DATE: 26-Mar-2001
CLASSIFICATION: <a href="https://document.com/">CLASSIFICATION: <a href="https://document.com/">CLASSIFICATION: <a href="https://document.com/">CLASSIFICATION: <a href="https://document.com/">CLASSIFICATION: <a href="https://document.com/">CLASSIFICATION: <a href="https://document.com/">CLASSIFICATION: <a href="https://document.com/">CURNICATION: <a href="https://document.com/">CLASSIFICATION: <a href="https://document.com/">CURNICATION: <a href="ht
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Human Genome Sciences, Inc.
STREET: 9410 Key West Avenue
CITY: Rockville
                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:

APPLICATION DATA:

APPLICATION NUMBER: 09/107,979

FILING DATE: «UNKNOWD:

ATTORNEY/AGENT INFORMATION:

NAME: CON1ey, Delirdre L.

REGISTRATION NUMBER: 36,487

REFERENCE/DOCKET NUMBER: P1084R1-2

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650/225-2066

TELEPHONE: 650/225-2081

INFORMATION FOR SED ID NO: 11:

SEQUENCE CHARACTERISTICS:

LENGTH: 45 anino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 14.2%; Score 55.5; DE Best Local Similarity 35.9%; Pred. No. 31; Matches 14; Conservative 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/471,377
FILING DATE: 23-DEC-1999
APPLICATION NUMBER: 08/915,096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE DESCRIPTION: SEQ ID NO: 11:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IDENTIFICATION METHOD:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: hBTC.efg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-201-945-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-817-647-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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TITLE OF INVENTION: HUMAN SOMATOMEDIAN CARRIER PROFEIN SUBUNITS
TITLE OF INVENTION: HUMAN SOMATOMEDIAN CARRIER PROCEDIAS,
TITLE OF INVENTION: HOSTS, PROCESSES AND HUMAN SOMATOMEDIAN CARRIER PROFEIN-LIKE
TITLE OF INVENTION: POLIFEPTIDES
TITLE OF INVENTION: POLIFEPTIDES
CURRENT APPLICATION NUMBER: US/09/865,578
CURRENT FILING DATE: 2001-05-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 9; Length 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14.2%; Score 55.5; DB 9;
35.9%; Pred. No. 32;
tive 5; Mismatches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 FSRCDGRCQRFCPNVVPKPLCIKICA---PGCVCRLGYL 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 FSRCPKQYKHYC----IKGRCRFVVAEQTPSCVCDEGYI 37
APPLICATION NUMBER: US 08/208,008
FILING DATE: 08-MAR-1994
ATTORNEY/AGENT INFORMATION:
                                                                                       NAME: Brookes, A. Anders
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF110D1
                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1999-09-16
PRIOR PELICATION NUMBER: 09/162,118
PRIOR PILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: 09/162,118
PRIOR PELING DATE: 1997-09-03
PRIOR FILING DATE: 1997-09-03
PRIOR FILING DATE: 1996-09-03
PRIOR FILING DATE: 1996-09-03
PRIOR APPLICATION NUMBER: 08/437,407
PRIOR APPLICATION NUMBER: 08/437,407
PRIOR APPLICATION NUMBER: 08/43,039
PRIOR FILING DATE: 1994-10-07
PRIOR PELING DATE: 1994-10-07
PRIOR PELING DATE: 1994-10-07
PRIOR APPLICATION NUMBER: 07/763,481
PRIOR APPLICATION NUMBER: 07/290,250
PRIOR APPLICATION NUMBER: 07/290,250
PRIOR PELING DATE: 1988-12-22
PRIOR PELING DATE: 1988-12-22
PRIOR PELING DATE: 1988-13-31
PRIOR PELING DATE: 1988-13-31
PRIOR PELING DATE: 1988-13-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/397,192
PRIOR FILING DATE: 1999-09-16
PRIOR APPLICATION NUMBER: 09/162,118
                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 11, Application US/09865578; Patent No. US20010034433A1
                                                                                                                                                                                         TELEX: 301-309-8504
TELEX: 301-309-8439
INFORMATION FOR SEQ IDNO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 46 aming acids
                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: E. MARTIN, SPENCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 35.9%
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
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LENGTH: 58
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Gaps

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Sequence 1773, Application US/09796692

| Sequence 1773, Application US/09796692
| Publication No. US20020198362A1
| GENERAL INFORMATION:
| APPLICANT: Algate, Alexander
| APPLICANT: Anjate, Jane |
| TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DETECTION, DIAGNOSIS AND THER
| TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DETECTION, DIAGNOSIS AND THER
| TITLE OF INVENTION: HEMATOLOGICAL MALIGNANCIES |
| FILE REFERENCE: 2077.001200 |
| CURRENT APPLICATION NUMBER: US/09/796,692 |
| CURRENT FILING DATE: 2000-03-01 |
| PRIOR FILING DATE: 2000-03-17 |
| PRIOR APPLICATION NUMBER: 60/200,545 |
| PRIOR PILING DATE: 2000-04-28 |
| PRIOR FILING DATE: 2000-04-28 |
| PRIOR FILING DATE: 2000-04-28 |
| PRIOR FILING DATE: 2000-04-28 |
| PRIOR PILING DATE: 2000-04-28 |
| PRIOR FILING DATE: 2000-04-28 |
| PRIOR FILING DATE: 2000-04-28 |
| PRIOR FILING DATE: 2000-05-01 |
| PRIOR FILING DATE: 2000-05-01 |
                                                                                                                                                                                                                  8;
                                                                                                                                             13.6%; Score 53; DB 10; Length 46; 48.1%; Pred. No. 55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 40;
          ; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.89; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 2.9 US-09-864-761-34995
                                                                                                                                                                                                                  5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 12.5%; Score 49; DB 10; Length 40 Best Local Similarity 48.0%; Pred. No. 1.2e+02; Matches 12; Conservative 2; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
US-09-917-340-73
Sequence 73, Application US/09917340
Patent No. US2002009369A1
GENERAL INFORMATION:
APPLICANT: Murphy, Christopher J.
APPLICANT: Marphy, Christopher J.
TITLE OF INVENTION: Transplant Media
FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/917,340
CURRENT APPLICATION NUMBER: 06/221.632
PRIOR FILING DATE: 2001-07-28
PRIOR FILING DATE: 2000-07-28
FRIOR FILING DATE: 2000-11.17
PRIOR FILING DATE: 2000-11.17
PRIOR FILING DATE: 2000-11.17
PRIOR FILING DATE: 2001-05-15
NUMBER OF SEQ ID NOS: 96
NUMBER OF SEQ ID NOS: 96
SEQ ID NO SEQ ID NOS: 96
                                                                                                                                                                                                        1; Mismatches
                                                                                                                                                                                                                                                                                                                   10 GGAGGRGGRGTR-----DGRIRR 28
                                                                                                                                                                                                                                                                          1 GGFGGLGGRGKCPSNEIFSRCDGRCQR 27
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                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT
; ORGANISM: Aedes aegypti
US-09-917-340-73
                                                                                                                                                                         Best Local Similarity
Matches 13; Conserva
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US-09-796-692-1773
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LENGIH: 40
                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
             Gaps
          17;
                                                                                                                  7 GLGPVVRC-----EPCDARALAQC---APPP---AVCAELVREPGCGCCLG 46
                                                                     5 GLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICA----PGCVCRLG 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N: EXPRESSED IN PLACENTA, SIGNAL = 1
N: EXPRESSED IN BRAIN, SIGNAL = 3.3
N: EXPRESSED IN BT474, SIGNAL = 1.9
N: EXPRESSED IN FETAL LIVER, SIGNAL = 1.7
N: EXPRESSED IN HEART, SIGNAL = 1.7
N: EXPRESSED IN HELA, SIGNAL = 1.7
N: EXPRESSED IN HELA, SIGNAL = 2.2
             15; Indels
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SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE REFERENCE: AGOMICA X-1

CURRENT APPLICATION NUMBER: US/09/864,761

CURRENT FILING DATE: 2001-05-23

PRIOR APPLICATION NUMBER: US 60/180,312

PRIOR FILING DATE: 2000-02-04

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-06-36

PRIOR FILING DATE: 2000-09-37

PRIOR FILING DATE: 2000-09-37

PRIOR FILING DATE: 2000-09-37

PRIOR FILING DATE: 2000-09-37

PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: US 99/608,408

PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: US 99/714,203
                                                                                                                                                                                                                                                                                                     ; Sequence 34995, Application US/09864761
; Patent No. US20020048763A1
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          7
                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Penn, Sharron G. APPLICANT: Rank, David R. APPLICANT: Hanzel, David K.
Matchês 18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION:
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INFORMATION:
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LENGTH: 46
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Sequence 1792, Application US/09796692
Sequence 1792, Application US/09796692
Sequence 1792, Application On. US/200201893624
SEMERAL INFORMATION:
APPLICANT: Algate, Paul A.
APPLICANT: Algate, Paul A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DETECTION, DIAGNOSIS AND THERAPY
TITLE DO INVENTION: COMPOSITIONS AND METHODS FOR THE DETECTION, DIAGNOSIS AND THERAPY
TITLE OF INVENTION: UNMER: US/09/796.692
CURRENT APPLICATION NUMBER: US/09/796.692
CURRENT APPLICATION NUMBER: US/09/796.692
PRIOR PLING DATE: 2000-03-01
PRIOR PLING DATE: 2000-03-01
PRIOR PLING DATE: 2000-04-04
PRIOR PLING DATE: 2000-04-04
PRIOR FLING DATE: 2000-04-04
PRIOR FLING DATE: 2000-04-04
PRIOR FLING DATE: 2000-04-04
PRIOR FLING DATE: 2000-05-04
PRIOR FLING DATE: 2000-05-04
PRIOR FLING DATE: 2000-05-04
PRIOR FLING DATE: 2000-06-04
PRIOR PLING DATE: 2000-06-07
PRIOR PLING DATE: 2000-08-07
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PRIOR APPLICATION NUMBER: 60/202,084
PRIOR FILING DATE: 2000-05-04
PRIOR PLICATION NUMBER: 60/206,201
PRIOR PLING DATE: 2000-05-22
PRIOR PLING DATE: 2000-07-14
PRIOR PLING DATE: 2000-07-142
PRIOR PLING DATE: 2000-08-03
PRIOR PLING DATE: 2000-08-03
PRIOR PLING DATE: 2000-08-04
PRIOR PLING DATE: 2000-08-07
PRIOR FLING DATE: 2000-08-07
PRIOR FLING DATE: 2000-08-07
PRIOR FLING DATE: 2000-08-07
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US-09-796-692-1773
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US-09-796-692-1792
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US-09-796-692-1792
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Query Match
Best Local Similarity 30.4%; Pred. No. 1.8e+02;
Matches 17; Conservative 3; Mismatches 22; Indels 14; Gaps 3;

Qy 4 GGLGGRGKCPSNEIFSRCDGRC----CATWCPNVVPRD----CINICAPGCVCRLG 51
Db 4 GGAARRAPCRS-----CATWCWGSTHSRWCYSTEPRPSPVPCRKSGTSGCWLRCG 53
Search completed: February 26, 2003, 15:20:10
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VPRSKCG 67
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Sequence 1, Appli
Sequence 1, Appli
Sequence 1491, Ap
Sequence 701, Ap
Sequence 701, App
                                                                        (without alignments)
122.719 Million cell updates/sec
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                                                            February 26, 2003, 15:10:48; Search time 352 Seconds
                                                                                                                         1 GGFGGLGGRGKCPSNEIFSR......CRLGYLRNKKKVCVPRSKCG
                                                                                                                                                                                                                                                                                            GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
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US-10-174-151-1
US-10-204-145-1
US-60-145-1896-1491
US-60-145-138-701
US-09-791-537-9664
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                                                                                                                                                                               4569144 seqs, 644733110 residues
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                                         - protein search, using sw model
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Listing first 45 summaries
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Match Length
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Sequence 195, App
Sequence 137772,
Sequence 913774,
Sequence 90125,
Sequence 60, Appl
Sequence 60, Appl
Sequence 31406, A
Sequence 31406, A
Sequence 51265, A
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Sequence 61, Appl
Sequence 61, Appl
Sequence 13914, A
Sequence 86288, A
Sequence 86289, A
Sequence 6113, App
Sequence 6113, App
Sequence 1132, App
Sequence 125018,
Sequence 125018,
Sequence 125018,
Sequence 3421, App
Sequence 103884,
Sequence 103884,
 3377, Ap
5102, Ap
3339, Ap
1354, Ap
4040, Ap
1552, Ap
1677, Ap
5359, Ap
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Sequence 1874, Ap
                         Sequence 3
Sequence 14
Sequence 14
Sequence 15
Sequenc
                                                           US-60-160-203-4074

US-60-160-123-1552

US-60-169-840-5359

US-60-9840-5359

US-60-9840-5359

US-60-98-556-11

US-60-98-556-11

US-60-9791-537-86288

US-60-9791-537-86289

US-60-9791-537-86289

US-60-162-134-132

US-60-162-134-132

US-60-162-134-132

US-60-160-137-452-114

US-60-160-203-3591

US-60-791-537-31406

US-60-791-537-31406
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US-60-389-987-1874
US-60-412-418-1874
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 84
82.5
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0;
             Sequence 1, Application US/09506978
GENERAL INFORMATION:
APPLICANT: Spertini, Francois
TITLE OF INFORMIN: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REPERENCE: 18519-01
CURRENT APPLICATION NUMBER: US/09/506,978
CURRENT FILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Apis mellifera
US-09-506-978-1
us-09-506-978-1
                                                                                                                                                                                                                                                                                   LENGTH: 67
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RESULT 3
US-10-204-145-1
; Sequence 1, Application US/10204145
; GENERAL INFORMATION:
; APPLICANT: Ecole Polytechnique Federale de Lausanne
; APPLICANT: Esoettini, Francois
; TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
; FILE REFERENCE: 18519-001-064 20349-543
; CURRENT APPLICATION NUMBER: US/10/204,145
; CURRENT FILING DATE: 2002-08-16
; PRIOR FILING DATE: 2000-02-18
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: Patentin Ver. 2.1
; SSO ID NO 1
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                                                      APPLICANT: Spertini, Francois
TITLE OF INVENTION: NOVEL BEE VENOM POLYPEPTIDES AND METHODS OF USE THEREOF
FILE REPRENCE: 18519-001
CURRENT APPLICATION NUMBER: US/10/174,151
CURRENT FILING DATE: 2000-06-18
PRIOR PRIOR TLING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 5
SOFWARE: PALENTIN VET. 2.0
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GENERAL INFORMATION:
APPLICANT: Kerlavage, Anthony
TITLE OF INVENTION: ISOLATED SECRETED PROTEINS, NUCLEIC ACID
TITLE OF INVENTION: MOLECULES ENCODING SECRETED PROTEINS, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                               Length 67;
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100.0%; Pred. No. 3.1e-32;
tive 0; Mismatches 0;
                   ; Sequence 1, Application US/10174151
; GENERAL INFORMATION:
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Best Local Similarity 100.0
Matches 67; Conservative
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US-10-174-151-1
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US-10-204-145-1
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US-10-174-151-1
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Best Local S
Matches 67
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APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
FILE REFERENCE: 261/210
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TITLE OF INVENTION: ISOLATED SECRETED PROTEINS, NUCLEIC ACID
TITLE OF INVENTION: MOLECULES ENCODING SECRETED PROFEINS, AND USES THEREOF
FILE REFERENCE: CLOOMO62
CURRENT APPLICATION NUMBER: US/60/145,138
CURRENT FILING DATE: 1999-07-22
NUMBER OF SEQ ID NOS: 948
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 701
LENTH: 62
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                                                                                                                                                                                                                                                                                                                                                                        4 RCPANETFLACGPDCQTECA-TLGKPCLVRHIRCPDGCYCNKGFARNAAGTCIPLRRC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIK--ICAPGCVCRLGYLRNKKKVCVPRSKC 66
                                                                                                                                                                                                                                                                                                                                                11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIK--ICAPGCVCRLGYLRNKKKVCVPRSKC
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κ
                                                                                                                                                                                                                                                  29.0%; Score 113.5; DB 27; Length 62; 36.2%; Pred. No. 0.0008; tive 8; Mismatches 26; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 27; Length 62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22.6%; Score 88.5; DB 21; Length 62; 33.3%; Pred. No. 0.29; Live 9; Mismatches 26; Indels 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29.0%; Score 113.5; DB 27; Length (36.2%; Pred. No. 0.0008;
Live 8; Mismatches 26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .. _ _ _ .. _ .. .. ..
FILE REFERENCE: CL000052
CURRENT PAPLICATION NUMBER: US/60/142,896
CURRENT FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 1584
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1491
LENGTH: 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION UNBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 9664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 9664, Application US/09791537 GENERAL INFORMATION: APPLICANT: Bionomix, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 701, Application US/60145138 GENERAL INFORMATION:
                                                                                                                                                                                                                                                  Ouery Match
Best Local Similarity 36.29
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 29.0%
Best Local Similarity 36.2%
Matches 21; Conservative
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                                                                                                                                                         TYPE: PRT
ORGANISM: Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Drosophila
US-60-145-138-701
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Matches 21; Conserv
                                                                                                                                                                                                         US-60-142-896-1491
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US-60-145-138-701
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US-60-163-123-1354
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                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                        Best Local
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                                                                                                                                                                                                  Sequence 3377, Application US/60160203
GENERAL INFORMATION:
TATLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: USES THEREOF
CURRENT APPLICATION NUMBER: US/60/160, 203
CURRENT APPLICATION NUMBER: US/60/160, 203
CURRENT FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 6374
SEQ ID NO 3377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5102, Application US/60169840
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: USOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: C1000164
CURRENT APPLICATION NUMBER: US/60/169,840
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TITLE OF INVENTION: UNCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS AND
TITLE OF INVENTION: USES THEREOF
FILE REPERENCE: CLOOO127
CURRENT APPLICATION NUMBER: US/60/162,247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
I GOERCGPNEVWIECTG-CEMKCGDPENTPCPLMCR--RPSCECSPGRGMRRINDGKCIPA 57
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Pred. No. 0.28;
7; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 27; Length 39;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 QCPANQVYQECGSACVKTCSN--PQHSCSSSCTFGCFCPEG 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11 KCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLG 51
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7; Mismatches
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GENERAL INFORMATION:
APPLICANT: Bonazzi, Vivien
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34.1%;
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34.1%;
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Best Local Similarity 34.19
Matches 14; Conservative
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Human
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                                                 64 SKC 66
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58 SQC 60
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DEPENDENT INCOMINION: VIVIEN
TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: USES THEREOF
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CLOOO137
CURRENT APPLICATION NUMBER: US/60/163,123
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 1986
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1354
LENGTH: 53
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TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: UCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS AND
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CLO00137
CURRENT APPLICATION NUMBER: US/60/163,123
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 1986
SOFTWARE: FACESQ for Mindows Version 4.0
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                                                                                                                                                                                                         Score 86.5; DB 27; Length 54;
Pred. No. 0.42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21.6%; Score 84.5; DB 27; Length 53; 30.8%; Pred. No. 0.66;
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                 NUMBER OF SEQ ID NOS: 5442
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3339
LENGTH: 54
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; GENERAL INFORMATION:
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CURRENT FILING DATE: 1999-10-29
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30.9%;
                                                                                                                                                                                                                                                              17; Conservative
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Matches 16; Conserv
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GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CLOO0137
CURRENT APPLICATION NUMBER: US/60/163,123
CURRENT FILING DATE: 1999-11-02
NUMBER OF SED ID NOS: 1986
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                              APPLICANT: BONAZZI, VIVIEN
TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS AND
TITLE OF INVENTION: WEST THEREOF
FILE REFERENCE: CL000116
CURRENT APPLICATION NUMBER: US/60/160,203
CURRENT FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 6374
SOFTWARE: FASLSEQ for Windows Version 4.0
SEQ ID NO 4074
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GENERAL INFORMATION:
APPLICANT: Bonazzi, vivien
TITLE OF INVENTION: ISOLATED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: UGCLEC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS AND
TITLE OF INVENTION: USES THEREOF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 KCPSNEIFSRC-----DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21.5%; Score 84; DB 27; Length 60; 31.7%; Pred. No. 0.83; Live 10; Mismatches 13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                      21.5%; Score 84; DB 27; Length 60; 31.7%; Pred. No. 0.83; tive 10; Mismatches 13; Indels
                                         Sequence 4074, Application US/60160203 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 31.7%
Matches 20; Conservative
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Best Local Similarity
Matches 20; Conserv
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RESULT 12
US-60-160-203-4074
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US-60-163-123-1677
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LENGTH: 60
                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                LENGTH
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US-60-169-840-5359
Sequence 5359, Application US/60169840
Sequence 5359, Application US/60169840
GENERAL INFORMATION:
TERMINERAL INFORMATION: Use the sequence STATE OF INVERTION: USELECTED HUMAN SECRETED PROTEINS,
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CL000164
CURRENT APPLICATION NUMBER: US/60/169,840
CURRENT PAPLICATION NUMBER: US/60/169,840
NUMBER OF SEQ ID NOS: 9628
SOFTWARER SELSEQ for Windows Version 4.0
SEQ ID NO 5359
LENGTH: 63
                                                                                                                                                                                                                                                                            21.5%; Score 84; DB 27; Length 60;
31.7%; Pred. No. 0.83;
Live 10; Mismatches 13; Indels 20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29; Indels 1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                   11 KCPSNEIFSRC------DGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKV 59
                                                                                                                                                                                                                                                                                                                                                                                                                12 CPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 27; Length 63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 21.1%; Score 82.5; DE Best Local Similarity 32.1%; Pred. No. 1.2; Matches 18; Conservative 8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search completed: February 26, 2003, 15:19:21 Job time : 353 secs
                  CURRENT APPLICATION NUMBER: US/60/163,123
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 1986
SSCTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1677
LENGTH: 60
                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 31.78
Matches 20; Conservative
FILE REFERENCE: CL000137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Human
US-60-169-840-5359
                                                                                                                                                                                                    ; ORGANISM: Human
US-60-163-123-1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60 CVP 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        58 CVP 60
                                                                                                                                                                               TYPE: PRT
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February 26, 2003, 15:11:03 ; Search time 24 Seconds
GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                   OM protein - protein search, using sw model
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(without alignments) 255.149 Million cell updates/sec US-09-506-978-1 391 1 GGFGGLGGRGKCPSNEIFSR.....CRLGYLRNKKWCVPRSKCG

BLOSUM62 Gapop 10.0 , Gapext 0.5 Perfect score: Scoring table: Sequence:

67

Total number of hits satisfying chosen parameters: 486122 seqs, 91396495 residues Searched:

Minimum DB seq length: 0 Maximum DB seq length: 67

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Pending_Patents_AA_New:*

1. /cgn2_6/ptcdata/2/paa/USO6_NEW_COMB.pep:*

2. /cgn2_6/ptcdata/2/paa/USO6_NEW_COMB.pep:*

3. /cgn2_6/ptcdata/2/paa/USO7_NEW_COMB.pep:*

4. /cgn2_6/ptcdata/2/paa/USO8_NEW_COMB.pep:*

5. /cgn2_6/ptcdata/2/paa/USO8_NEW_COMB.pep:*

6. /cgn2_6/ptcdata/2/paa/USO8_NEW_COMB.pep:*

7. /cgn2_6/ptcdata/2/paa/USO8_NEW_COMB.pep:*

7. /cgn2_6/ptcdata/2/paa/USO8_NEW_COMB.pep:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		æ			SUMMARIES	
Result No.	Score	Query Match	Length	DB	ID	Description
П	119	٠.	67	9	S-10-038-8	Sequence 185, App
7	ဖ	16.1	09	9	9-353-5	59, 7
ю	62.5	•	62	9	US-10-285-876-5	
4	61		99	-	r-US02-32727	64
Ŋ	61	•	99	S	25-645	6458,
9	61	15.6	99	9	-10-057-49	6458,
7	58.5		61	9	US-10-170-385-239	239, A
œ	58		26	H	PCT-US02-32727-9993	9993,
σ	58	4	56	Ŋ	8-825-999	9993,
10	S	14.8	26	9	US-10-057-498-9993	
11	57.5		61	ဖ	US-10-170-385-241	equence 241,
12	7	4	61	7	50-440	445,
13	57		67	ហ	-724-676-8152	81522
14	57	14.6	67	Ŋ	-09-724-676A-8	81522,
15	ė.		61	9	-10-170-385-	265, Ap
16	9		61	7	US-60-423-586-136	136
17	56.5	14.5	61	7	-60-427-19	13
18	5		46	വ	-09-857-	4,
19	55.5		47	S	US-09-857-815A-3	3
20	ď.		47	Ŋ	US-09-857-815A-12	12
21	55.5		48	ഹ	US-09-857-815A-11	11
22	S.	4	48	S	US-09-857-815A-14	14,
23	'n.		49	Ŋ	-815A	10,
24	S.		49	S	US-09-857-815A-13	13,
25	2	14.2	58	9	US-10-231-778-229	229,
56	55	14.1	99	Н	PCT-US02-32727-16329	163

	Sequence 233, App Sequence 47, Appl Sequence 4852, Ap Sequence 4852, Ap
US-09-978-825-16329 US-10-057-498-16329 US-10-057-498-16329 US-09-978-825-6751 US-09-857-44 US-09-857-815-44 US-09-10-203-315-44 US-09-174-676-81494 US-09-724-676-81494 US-09-724-676-81494 US-09-724-676-81494 US-09-724-676-81494 US-09-724-676-81494 US-09-724-676-81494 US-09-724-678-825-20050 US-10-057-498-20050 US-10-018-140-3458	US-10-231-778-233 PCT-US02-18256-47 PCT-US02-32727-4852 US-09-978-825-4852
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888 888 888 888 888 888 888 888 888 88	50 50 50 50
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	4444 5443

ALIGNMENTS

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APPLICANT: Casman, Stacie J
APPLICANT: Boldog, Ferenc
APPLICANT: Burgess, Catherine E
APPLICANT: Edinger, Shlomit R
APPLICANT: Elerman, Karen
APPLICANT: Elerman, Karen
APPLICANT: Smithson, Glennda
APPLICANT: MacDougall John R
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FIE REPERRNC: 21402-230
CURRENT APPLICATION NUMBER: US/10/038,854
CURRENT FILING DATE: 2003-01-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT FILING DATE: 2003-01-22
PRIOR APPLICATION NUMBER: 60/258,928
PRIOR PELING DATE: 2000-12-29
PRIOR PELING DATE: 2000-12-29
PRIOR PELING DATE: 2001-01-02
PRIOR PELING DATE: 2001-01-02
PRIOR FILING DATE: 2001-01-04
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/259,832
PRIOR PILING DATE: 2001-02-29
PRIOR PILING DATE: 2001-02-29
PRIOR FILING DATE: 2001-03-29
                                         Sequence 185, Application US/10038854
GENERAL INFORMATION:
APPLICANT: Spytek, Kimberly A
APPLICANT: Li, Li
APPLICANT: Wolenc, Adam R
APPLICANT: Vernet, Corine
APPLICANT: Eisen, Andrew J
                                                                                                                                                                                                Liu, Xiaohong
Malyankar, Uriel M
Shimkets, Richard A
                                                                                                                                                                                                                                                                                            Spaderna, Steven K
Gorman, Linda
Kekuda, Ramesh
                                                                                                                                                                                                                                                                                                                                                                                        Gusev, Vladimir Y
Gangolli, Esha A
Guo, Xiaojia S
                                                                                                                                                                                                                                                                           Tchernev, Velizar
                                                                                                                                                                                                                                                                                                                                                                  Patturajan, Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shenoy, Suresh G
Rastelli, Luca
RESULT 1
US-10-038-854-185
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APPLICANT:
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APPLICANT:
APPLICANT:
APPLICANT:
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APPLICANT:
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RESULT 3
US-10-285-876-5
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APPLICANT: Goodearl, Andrew D.J.
APPLICANT: McCarthy, Sean A.
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
TITLE OF INVENTION: PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
TITLE OF INVENTION: USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12 CPSNEIFSRCDGRCQRFCPN-----VVP-----KPLCIKICAPGCVCRLGYLRNKK-KV 59
PRIOR APPLICATION NUMBER: 60/283,889
PRIOR FILING DATE: 2001-04-13
PRIOR FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-18
PRIOR FILING DATE: 2001-04-18
PRIOR PILING DATE: 2001-04-25
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 411
SOFTWARE: PATCHIN Ver. 2.1
SEQ ID NO 185
                                                                                                                                                                                                                                                                                                                                                                                                                              23; Indels 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .,
                                                                                                                                                                                                                                                                                                                                                                          Score 119; DB 6; Length 67;
Pred. No. 1.3e-05;
7; Mismatches 23; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 16.1%; Score 63; DB 6; Length 60; Best Local Similarity 38.1%; Pred. No. 9.7; Matches 16; Conservative 2; Mismatches 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10 OKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGC--VCR 49
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/269, 353
CURRENT FILING DATE: 2002-10-11
PRIOR APPLICATION NUMBER: US 09/790, 264
PRIOR FILING DATE: 1090-02-21
PRIOR FILING DATE: 1998-04-23
PRIOR FILING DATE: 1999-04-23
PRIOR PPLICATION NUMBER: US 09/298, 531
PRIOR PELING DATE: 1999-04-23
PRIOR PILING DATE: 1999-04-23
PRIOR PLING DATE: 1999-06-22
PRIOR PLING DATE: 1999-06-22
PRIOR PPLICATION NUMBER: US 09/102, 705
PRIOR PLING DATE: 1999-06-22
PRIOR PPLICATION NUMBER: US 09/102, 705
PRIOR PPLICATION NUMBER: US 09/363, 630
PRIOR PPLING DATE: 1999-07-29
PRIOR PPLING DATE: 1999-07-29
PRIOR PPLING DATE: 1999-07-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 59, Application US/10269353 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: MPI2000-5380MNICN1M
                                                                                                                                                                                                                                                                                                                                                                               30.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Rattus norvegicus US-10-269-353-59
                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 37.3
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 68
                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60 CVPRSKC 66
                                                                                                                                                                                                                                                                                                                                US-10-038-854-185
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LENGTH: 60
                                                                                                                                                                                                                                                                                    TYPE: PRT
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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 GGSCTCAGSCKCKECKCTS-CKKSCCSCCP----VGCAK-CAQGCVCKAG 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 62;
                                                                                                                  TITLE OF INVENTION: Metallothionein Derivatives with Biological Recognition Specificity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                      PatentIn Release #1.0, Version #1.30
                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
STREET: 268 BUSH STREET, SUITE 3200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
16.0%; Score 62.5; DB 6;
Best Local Similarity 37.3%; Pred. No. 11;
Matches 19; Conservative 2; Mismatches 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/780,717
FILING DATE: «UNKNOWN»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/10/285,876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: OSMAN, RICHARD A
REGISTRATION NUMBER: 36,627
REFERENCE/DOCKET NUMBER: B91-028
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: Not Relevant
TOPOLOGY: Not Relevant
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-10-285-876-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 6458, Application PC/TUS0232727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Maisonneuve, Jean Francois
                                                                    Glazer, Alexander N
Cantor, Charles R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 01-Nov-2002 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (415) 343-4341
TELEFAX: (415) 343-4342
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                    ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
; Sequence 5, Application US/10285876 ; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 62 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
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                                              APPLICANT: Sano, Takeshi
                                                                                                                                                                                                                                                   CITY: SAN FRANCISCO
                                                                                                                                                                                                                                                                           STATE: CALIFORNIA COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Mitcham, Jennifer
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Bhatia, Ajay
                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lodes, Michael
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Wang, Siqing
Jen, Shyian
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Benson, Darin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jones, Robert
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Yanni
                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE:
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APPLICANT: Persing, David
TITLE OF INVENTION: Compositions and Methods for the Therapy and Diagnosis of Acne
CILE REFERENCE: 210121.514
CURRENT APPLICATION NUMBER: US/10/057,498
CURRENT FILING DATE: 2001-04-20
                                                                                                                                                                                                                                                                                                                          2 GFGGLGGRGKC---PSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCRLGYLRNKKK 58
                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                    Score 61; DB 6; Length 66; Pred. No. 17;
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                                                                                                                                                                                                                                                                                           27;
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; Pred. No. 29;
6; Mismatches
                                                                                                                                                                                                                                                                                         6; Mismatches
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APPLICANT: White, JONATHAN
APPLICANT: Binley, Katie Mary
APPLICANT: Rayner, William Nigel
APPLICANT: Naylor, Stuart
APPLICANT: Naylor, Stuart
APPLICANT: Krige, David
TILE OF INVENTION: ANALYSIS METHOD
FILE REFERENCE: 53268200100
CURRENT APPLICATION NUMBER: US/10/170,385
CURRENT PILING DATE: 2002-06-12
PRIOR PAPLICATION NUMBER: PCT/GB01/05458
PRIOR PPLING DATE: 2002-04-08
PRIOR PPLICATION NUMBER: PCT/GB01/05458
PRIOR PILLING DATE: 2002-01-08
PRIOR PILLING DATE: 2001-112-10
NUMBER OF SEQ ID NOS: 549
SOFTWARE: FESTSEQ FOR WINDOWS VERSION 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mundy, Christopher Robert
Kan, On
Harris, Robert Alan
White, Jonathan
Binley, Katie Mary
Rayner, William Nigel
Naylor, Stuart
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 239, Application US/10170385 GENERAL INFORMATION:
                                                                                NUMBER OF SEQ ID NOS: 29212
SEQ ID NO 6458
LENGTH: 66
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31.8%;
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32.7%;
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Persing, David
Bhatia, Ajay
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Best Local Similarity 31.89
Matches 21; Conservative
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Best Local Similarity 32.7%
Matches 16; Conservative
                                                                                                                                                                 TYPE: PRT; ORGANISM: Propioni acnes US-10-057-498-6458
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APPLICANT:
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APPLICANT:
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APPLICANT:
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                TITLE OF INVENTION: Compositions and Methods for the Therapy and Diagnosis of Acnes FILE REFRENCE: 210121.514C1
CURRENT APPLICATION NUMBER: PCT/US02/32727
CURRENT FILING DATE: 2002-10-11
NUMBER OF SEQ ID NOS: 30992
SEQ ID NO 6458
LENGTH: 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Douglass, John TITLE OF INVENTION: Compositions and Methods for the Therapy and Diagnosis of Acnes FILE REFERENCE: 210121.51401
CURRENT APPLICATION NUMBER: US/09/978,825
CURRENT FILING DATE: 2003-01-29
NUMBER OF SEQ ID NOS: 30992
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Pred. No. 17;
6; Mismatches 27; Indels
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Bhatia, Ajay
Maisonneuve, Jean Francois
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; GENERAL INFORMATION:
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GENERAL INFORMATION:
APPLICANT: Mitcham, Jennifer
APPLICANT: Skeiky, Yasır
                                                                                                                                                                                                                                       15.6%;
31.8%;
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                                                                                                                                                                                                                                                                            21; Conservative
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Benson, Darin
Jones, Robert
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Best Local Similarity 31.89
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Barth, Brenda
  Douglass, John
                                                                                                                                                                             ; ORGANISM: Propioni acnes
PCT-US02-32727-6458
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Wang, Siqing
Jen, Shyian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Propioni acnes US-09-978-825-6458
                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                              59 VCVPRS 64
                                                                                                                                                                                                                                                                                                                                                                                                                                   58 PCQPPS 63
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LENGTH: 66
APPLICANT:
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APPLICANT: Persing, David
TITLE OF INVENTION: Compositions and Methods for the Therapy and Diagnosis of Acne
FILE REFERENCE: 210121.514
CURRENT APPLICATION NUMBER: US/10/057,498
CURRENT FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 29212
SEQ ID NO 9993
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APPLICANT: NADLER, STEVEN G.
APPLICANT: CARMAN, JULIE
TITLE OF INVERTION: POLYNOCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE TITLE OF INVERTION: NE'RB PATHWAY
FILLE OF INVERTION NIVER: US/60/440,068
CURRENT APPLICATION NUMBER: US/60/440,068
CURRENT APPLICATION NUMBER: 2003-01-14
NUMBER OF SEQ ID NOS: 276
SOFTWARE: Patentin Ver. 2.1
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Pred. No. 31;
                                                                                                                                                                                                                                                                                                                                                    16; Indels
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                                                                                                                                                                                                                                                                                                                                                       4; Mismatches
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CURRENT FILING DATE: 2002-06-12
PRIOR APPLICATION NUMBER: PCT/GB02/01662
PRIOR FILING DATE: 2002-04-08
PRIOR FILING DATE: 2002-04-08
PRIOR FILING DATE: 2001-12-10
NUMBER OF SEQ ID NOS: 549
SOFTWARE: FEASTSEQ for Windows Version 4.0
SEQ ID NO 241
LENGTH: 61
                                                                                                                                                                                                                                                                                                                                                                                                  32 VVPKPLCIKICAPGCVCRLGYLRNKKKVCVPR 63
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Harris, Robert Alan
APPLICANT: White, Jonathan
APPLICANT: White, Jonathan
APPLICANT: Binley, Katle Mary
APPLICANT: Rayner, William Nigel
APPLICANT: Kingsman, Susan Mary
APPLICANT: Kingsman, Susan Mary
APPLICANT: Krige, David
TITLE OF INVENTION: ANALYSIS METHOD
FILE REFERENCE: $3268200010
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APPLICANT: Mundy, Christopher Robert
APPLICANT: Kan, On
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                                                                                                                                                                                                                                                                                                         14.8%;
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Best Local Similarity 32.69
Matches 15; Conservative
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Best Local Similarity 37.5%
Matches 12; Conservative
                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Propioni acnes
US-10-057-498-9993
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US-60-440-068-445
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APPLICANT: Zhang, Yanni
APPLICANT: Zhang, Yanni
APPLICANT: Wang, Siqing
APPLICANT: Wang, Sinyian
APPLICANT: Lodes, Michael
APPLICANT: Lodes, Michael
APPLICANT: Benson, Darin
APPLICANT: Carter, Darint
APPLICANT: Compositions and Methods for the Therapy and Diagnosis of Acnes VICTER REFERENCE: 210121.514C1
CURRENT APPLICATION WHOBER: US/09/978,825
CURRENT FILING DATE: 2003-01-29
NUMBER OF SEQ ID NOS: 30992
                                                                                                                                                                                                                 APPLICANT: Douglass, John
TITLE OF INVENTION: Compositions and Methods for the Therapy and Diagnosis of Acnes '
TITLE OF INVENTION: Compositions and Methods for the Therapy and Diagnosis of Acnes '
FILE REFERENCE: 210121.51461
CURRENT APPLICATION NUMBER: PCT/US02/32727
CURRENT FILING DATE: 2002-10-11
NUMBER OF SEQ ID NOS: 30992
LENGTH: 56
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14.8%; Score 58; DB 5; Length 56;
Best Local Similarity 37.5%; Pred. No. 31;
Matches 12; Conservative 4; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 14.8%, Score 58; DB 1; Length 56; Best Local Similarity 37.5%; Pred. No. 31; Matches 12; Conservative 4; Mismatches 16; Indels
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; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 9993, Application US/09978825 GENERAL INFORMATION:
                                                                      Jen, Shyian
Lodes, Michael
Benson, Darin
Jones, Robert
Carter, Darrick
Barth, Brenda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Mitcham, Jennifer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Skeiky, Yasir
Persing, David
Bhatia, Ajay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Propioni acnes US-09-978-825-9993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Skeiky, Yasir
                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Propion1 acnes
PCT-US02-32727-9993
                                                    Wang, Siging
                              Zhang, Yanni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
US-10-057-498-9993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-978-825-9993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 9993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; APPLICANT:
                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                  APPLICANT:
APPLICANT:
                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                              APPLICANT:
                              APPLICANT:
                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 9
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Gaps
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                                                                                                                            Ouery Match

14.7%; Score 57.5; DB 7; Length 61;
Best Local Similarity 36.7%; Pred. No. 37;
Matches 18; Conservative 2; Mismatches 22; Indels
                                                                                                                                                                                                                 1 GGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                                                                                                                                                             10 GGSCTCAGSCKCKECKCTS-CKKSCCSCCP----VGCAK-CAQGCVCK 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14.6%; Score 57; DB 5; Length 67; 43.2%; Pred. No. 45; tive 1; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14.6%; Score 57; DB 5; Length 67; 43.2%; Pred. No. 45; Live 1; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                  Sequence 81522, Application US/09724676
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SEQ ID NO 81522
LENGTH: 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REPERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
NUMBER OF SEQ ID NOS: 97222
SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGFGGLGGR-GKCPSNEIFSRCDGRCQRFCPNVVPKP 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 GGGGLGGGWEKCLE---FPLALGHSNKLCPRVSPFP 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGFGGLGGR-GKCPSNEIFSRCDGRCQRFCPNVVPKP 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 GGGGLGGGWEKCLE---FPLALGHSNKLCPRVSPFP 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 81522, Application US/09724676A
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Ward, Neil Raymond
APPLICANT: Mundy, Christopher Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 265, Application US/10170385
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 43.28
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 43.2
Matches 16; Conservative
                                    TYPE: PRT; ORGANISM: HOMO Sapiens
US-60-440-068-445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Homo sapiens
US-09-724-676-81522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT

ORGANISM: Homo sapiens

US-09-724-676A-81522
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US-09-724-676A-81522
                                                                                                                                                                                                                                                                                                                           RESULT 13
US-09-724-676-81522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SEQ ID NO 81522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-170-385-265
; SEQ ID NO 445
                       LENGTH: 61
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Job time

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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 GSCKCKE--CKCTS-CKKSCCSCPVG-CAK-CAQGCICK 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 GKCPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCVCR 49
                                                                                                          APPLICANT: Kingsman, Sugard Mary
APPLICANT: Krige, David
TITLE OF INVENTION: ANALYSIS METHOD
TITLE REPERENCE: 522682000100
CURRENT FILING DATE: 2002-06-12
PRIOR APPLICATION NUMBER: PCT/GB01/01662
PRIOR FILING DATE: 2002-04-08
PRIOR FILING DATE: 2002-04-08
PRIOR FILING DATE: 2001-12-10
NUMBER OF SEQ ID NOS: 549
SOFTWARE: FastSEQ for Windows Version 4.0
SSOFTWARE: 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Search completed: February 26, 2003, 15:19:50
                                   White, Jonathan
Binley, Katie Mary
Rayner, William Nigel
Naylor, Stuart
Kan, On
Harris, Robert Alan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-170-385-265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 14; Conserva
                                                                           APPLICANT:
                APPLICANT:
APPLICANT:
                                                          APPLICANT:
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APPLICANT:
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GenCore version 5.1.3

Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: February 26, 2003, 15:10:07; Search time 14 Seconds

(without alignments)
140.810 Million cell updates/sec

Title:
US-09-506-978-1
Sequence:
1 GGFGLGGRGKCPSNEIFSR......CRLGYLRNKKKVCVPRSKCG 67
Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5
Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 188167
Minimum DB seq length: 67
Maximum DB seq length: 67
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Maximum Match 100% Listing first 45 summaries

Post-processing: Minimum Match 0%

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Sequence 61. Appl	9	19	(1)	61,	61,	61,	61,	61		61,	400	400	400,	60.7	60,	60,	60,	60,	60,	Sequence 60, Appl	60	.09	09	09		
	US-08-465-380-61	US-08-486-397-61	-08-486-399	-461-965	-08-634-641	-09-249-471	-09-249-472	US-09-249-451-61	-08-809-455	-09-249-46	-09-249	-08-637	-08 - 871	US-09-201-945-400				-461-	-08-634	9-249-471-	US-09-249-472-60	US-09-249-451-60	US-08-809-455-60	US-09-249-461-60	-249-448	-780-717	US-08-785-530-3
DB	7	7	7	7	7	m	m	m	m	e	m	7	m	4	7	7	~	7	7	٣	m	m	m	m	3	4	7
Length	61	61	61	61	61	61	61	61	61	61	61	47	47	47	28	28	28	28	58	58	28	28	28	28	28	62	61
% Query Match		21.0	21.0	21.0			21.0	21.0	21.0		21.0	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	16.0	15.2
Score	82	82	82	82	82	82	82	82	82	82	82	9	89	68	68	89	68	89	9	89	89	89	89	68	68	62.5	9
Result No.	н	7	e	4	S	9	7	ω,	σ.	10	11	12	13	14	15	16	17	18	19	20	77	22	23	24	25	26	27

Sequence 3, Appli Sequence 1, Appli Sequence 1, Appli Sequence 4, Appli Sequence 20, Appli Sequence 20, Appli Sequence 11, Appl Sequence 11, Appli Sequence 11, Appli Sequence 11, Appli Sequence 11, Appli Sequence 12, Appli	6, 66, 18, 18, 118, 115, 13, 13, 13, 13, 13, 13, 13, 13, 13, 13
US-09-123-850-3 US-08-785-530-1 US-09-123-850-1 US-09-123-850-4 US-09-123-850-4 US-09-394-630-20 US-08-990-516-47 US-08-915-11 US-09-126-121-11 US-08-915-096A-12	US-09-123-850-6 US-09-123-850-6 US-08-185-530-5 US-08-369-829A-18 5177197-48 US-08-761-248B-15 US-08-465-794-3
UUUUU40m44	00000000
61 61 61 61 10 10 45 45	61 61 61 64 44 8
155 155 165 175 175 175 175 175 175 175 175 175 17	13.9 13.9 13.8 13.8 13.3 13.3
59.5 59.5 57.5 57.5 55.5 55.5 55.5	5.4.5 6.5.5 5.5.5 5.5.5 7.5.5 7.5.5 7.5.5 7.5.5 7.5.5
22 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	w w 4 4 4 4 4 w w 0 1 1 2 w 4 1

ALIGNMENTS

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APPLICANT: George P. Vlasuk, Patric H. Stanssens,
APPLICANT: Joris H.L. Mensens, Marc J. Lauwereys,
APPLICANT: Yves R. Larcche, Laurent S. Jespers,
APPLICANT: Peter W. Bergum
TITLE OF INVENTION: NEMATODE-EXTRACTED ANTICOAGULANT
TITLE OF INVENTION: NEMATODE-EXTRACTED ANTICOAGULANT
NUMBER OF SEQUENCES: 356
CORRESPONDENCE ADDRESS:
STREFT: Lyon 'S STREET STREET STREET STREET.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/465,380
FILING DATE: June 5, 1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTORNEY AGENT INCRMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,115
                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: IBM P.C. DOS 5.0 SOFTWARE: Word Perfect 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      213/268
                                                                                                                                                                                                                                                                              ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Sulte 4700
CITY: Los Angeles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Necator americanus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-310
INFORMATION FOR SEQ ID NO: 61:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                               STATE: California
COUNTRY: U.S.A.
ZIP: 90071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
US-08-465-380-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
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US-08-486-399-61
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                                                                                                19; Indels 10; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 CPANEEWRECGTPCEPKCNOPPWP-----DICTMNCIVDVCQCKEGYKRHETKGCL 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19; Indels 10;
                                                                                                                                                12 CPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCV-----CRLGYLRNKKKVCV 61
                                                                                                                                                                        Query Match

21.0%; Score 82; DB 2; Length 61;
Best Local Similarity 30.9%; Pred. No. 0.051;
Matches 17; Conservative 9; Mismatches 19; Indels
                                                 21.0%; Score 82; DB 2; Length 61; 30.9%; Pred. No. 0.051;
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: George P. Vlasuk, Patric H. Stanssens, APPLICANT: Goris H.L. Mensens, Marc J. Lauwereys, APPLICANT: Yves R. Laroche, Laurent S. Jespers, APPLICANT: Yeek G.J. Gansemans, Matthew Moyle, APPLICANT: Peter W. Bergum
TITLE OF INVENTION: NEMATODE-EXTRACTED ANTICOAGULANT ITLE OF INVENTION: PROTEIN
                                                                                                   9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READBLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM COMPACTION
COMPUTER: IBM COMPACTION
COPERATION SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: WORD PEFFECT 5.1
CURRENT APPLICATION DATA:
FILING DATE: June 5, 1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/326,110
FILING DATE: OCTOBER 18, 1994
ATTORNEY AGENT THYORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE DOCKET NUMBER: 213/269
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                   Sequence 61, Application US/08486397
Patent No. 5866542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORCANISM: Necator americanus US-08-486-397-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 61 amino acids
                                                    Query Match
Best Local Similarity 30.99
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
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                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90071
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                                                                                                                                                                                                                                                                                             US-08-486-397-61
            US-08-465-380-61
                                                                                                                                                                                                                                                                            RESULT 2
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RESULT 3

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12 CPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCV----CRLGYLRNKKKVCV 61
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APPLICANT: George P. Vlasuk, Patric H. Stanssens,
APPLICANT: George P. Vlasuk, Patric H. Stanssens,
APPLICANT: Joris H.L. Mensens, Marc J. Lauwereys,
APPLICANT: Yanick G.J. Gansemans, Matthew Moyle,
APPLICANT: Peter W. Bergum
TITLE OF INVENTION: NEMATOBE-EXTRACTED ANTICOAGULANT
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 356
Sequence 61, Application US/08486399
Patent No. 5865543
GENERAL INFORMATION:
APPLICANT: George P. Vlasuk, Patric H. Stanssens, APPLICANT: Joris H.L. Mensens, Marc J. Lauwereys, APPLICANT: Yves R. Laroche, Laurent S. Jespers, APPLICANT: Yannick G.J. Gansemans, Matthew Moyle, APPLICANT: Peter W. Bergum APPLICANT: Peter W. Bergum TITLE OF INVENTION: NEWATODE-EXTRACTED ANTICOAGULANT TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: 3.5" Diskette, 1.44 Mb MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: WORD Perfect 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/486,399
FILING DATE: June 5, 1995
CLASSIFICATION: 530
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REGISTRARION NUMBER: 30,158
REFERENCE/DOCKET NUMBER: 213/270
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 61, Application US/08461965; Patent No. 5872098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Salite 4700
CITY: Los Angeles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Necator americanus US-08-486-399-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-1600 (213) 489-
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Best Local Similarity 30.99
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 3 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90071
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linear
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APPLICANT:
APPLICANT:
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APPLICANT:
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VENTION: NEMATODE-EXTRACTED ANTICOAGULANT
VENTION: PROTEIN
FEQUENCES: 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gansemans, Yannick Georges Jozef
Moyle, Matthew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 61, Application US/08634641
Patent No. 5955294
GENERAL INFORMATION:
APPLICANT: Stanssens, Patrick Eric Hugo
APPLICANT: Mensens, Joris Hilda Lieven
APPLICANT: Lauwereys, Marc Josef
APPLICANT: Lauwereys, Marc Josef
APPLICANT: Laucoche, Yves Rene
APPLICANT: Laucoche, Yves Rene
APPLICANT: Laucoche, Yves Rene
                                                                                                                                                                                                                          CURRENT ADDITIONAL COMPUTATIONAL CONTROLL STREM: IBM PC. DOS 5.0 SOFTWARE: Word Perfect 5.1 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/461,965 FILING DATE: June 5, 1995 CLASSIFICATION: 530 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/326,110 FILING DATE: OCCODE. 18, 1994 ATTORNEY/AGBAT INFORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,158 REFERENCE/POCKET NUMBER: 210/243 TELECOMMUNICATION:
                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
                    ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORNATION FOR SEQ ID NO: 61:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 amino acids
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                           STATE: California COUNTRY: U.S.A. ZIP: 90071
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                             Los Angeles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Los Angeles
STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
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US-08-634-641-61
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
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10; Gaps
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-~hes 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 21.0%; Score 82; DB 2; Length 61; Best Local Similarity 30.9%; Pred. No. 0.051; Matches 17; Conservative 9; Mismatches 19; Indels
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TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE
TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 356
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vlasuk, George Phillip
Stanssens, Patrick Eric Hugo
Messens, Joris Hilda Lieven
Lauwereys, Marc Josef
Laroche, Yves Rene
Jespers, Laurent Stephane
Gansemans, Yannick Georges Jozef
Moyle, Matthew
                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/13231
FILING DATE: October 17, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: October 18, 1994
ATTORNEY/AGRYT INFORMATION:
NAME: BIGGS, SUZANDE L.
REGISTRATION NUMBER: 30,158
REFRERENCE/DOCKET NUMBER: 219/136
TELECOMMUNICATION INFORMATION:
TELECHHONE: (213) 489-1600
TELEFAX: (213) 955-0440
COMDUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/634,641
FILING DATE: April 19, 1996
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 61, Application US/09249471 Patent No. 6040441 GENERAL INFORMATION:
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633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Necator americanus US-08-634-641-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: peptide ORIGINAL SOURCE:
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Los Angeles
California
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STREET: 633 West Fifth Street
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TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE
TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT
TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Laroche, Yves Rene APPLICANT: Jespers, Laurent Stephane APPLICANT: Gensemans, Yannick Georges Jozef APPLICANT: Moyle, Matthew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Vlasuk, George Phillip
APPLICANT: Vlasuk, George Phillip
Stanssens, Patrick Eric Hugo
APPLICANT: Messens, Joris Hilda Lieven
APPLICANT: Lauwereys, Marc Josef
APPLICANT: Laroche, Yves Rene
APPLICANT: Jespers, Laurent Stephane
APPLICANT: Gensemans, Yannick Georges Jozei
                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/809,455
FILING DATE: APTI1 17, 1997
APPLICATION NUMBER: PCT/US95/13231
FILING DATE: October 17, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/466,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTORNEY/AGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
RABEL STRATION NUMBER: 30,158
                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: Storage
COMPUTER: ISC COMPATIBLE
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: WORD Perfect 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 216/270
TELECOMMUNICATION INFORMATION:
TELEFAX: (213) 955-0440
TELEFAX: (713) 955-0440
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 61 amino acids
TYPE: amino acid
                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/249,471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 61, Application US/09249472 Patent No. 6046318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Necator americanus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
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10; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 21.0%; Score 82; DB 3; Length 61; Best Local Similarity 30.9%; Pred. No. 0.051;
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APPLICANT: Bergum, Peter W.
TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT
TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lauwereys, Marc Josef
Laroche, Yves Rene
Jaspers, Laurent Stephane
Gansemans, Yannick Georges Jozef
Moyle, Matthew
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Messens, Joris Hilda Lieven
                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/809,455
FILING DATE: APPLIL 7, 1997
APPLICATION NUMBER: PCT/US95/13231
FILING DATE: October 17, 1995
APPLICATION NUMBER: PCT/US95/13231
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/486,397
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: JUNE 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTORNEY/AGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,156,770
                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 216/270
TELECOMMUNICATION INFORMATION:
TELEPAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                 COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/249,472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vlasuk, George Phillip
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 61, Application US/09249451; Patent No. 6087487; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Necator americanus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 amino acids
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Suite 4700
                        Los Angeles
California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
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                                                                   U.S.A.
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                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                         90071
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APPLICANT:
APPLICANT:
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APPLICANT:
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                                                                   COUNTRY:
                                                STATE:
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21.0%; Score 82; DB 3; Length 61;
30.9%; Pred. No. 0.051;
tive 9; Mismatches 19; Indels 10; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NEMATODE-EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT
                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/809,455
FILING DATE: APril 17, 1997
PRIOR APPLICATION NUMBER: DCT/0895/13231
FILING DATE: October 17, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: October 18, 1994
ATTORNEY,AGENT THRORMATION:
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Messens, Joris Hilda Lieven
                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 30,158
REFERENCE/DOCKET NUMBER: 216/270
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vlasuk, George Phillip
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Patent No. 6096877
GENERAL INFORMATION:
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                                                                                                                                                                    ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Necator americanus US-08-809-455-61
                             APPLICANT: Bergum, Peter W.
TITLE OF INVENTION: NEMATODE-I
TITLE OF INVENTION: NHIBITORS
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 356
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Laroche, Yves Rene
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TELEFAX: (213) 955-0440
TELES: 67-3510
INFORMATION FOR SEC ID NO: 61:
SEQUENCE CHARACTERISTICS:
         APPLICANT: Moyle, Matthew
APPLICANT: Bergum, Peter W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: BIGGS, SUZANNE L. REGISTRATION NUMBER: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 30.99
Matches 17; Conservative
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                                                                                                                                                                                                                                         CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
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APPLICANT:
APPLICANT:
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Stanssens, Patrick Eric Hugo
Messens, Joris Hilda Lieven
Lauwereys, Marc Josef
Laroche, Yves Rene
Jespers, Laurent Stephane
Gansemans, Yannick Georges Jözef
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRICATION DATA:
APPLICATION NUMBER: 06/809,455
FILING DATE: APFLI]7,1997
APPLICATION NUMBER: PCT/US95/13231
APPLICATION NUMBER: PCT/US95/13231
FILING DATE: October 17, 1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326,110
FILING DATE: June 5, 1995
APPLICATION NUMBER: 1994
ATTORNEY/AGGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,15,770
REFERENCE AND NUMBER: 30,15,770
                                                                                                                                                                                                                                                     MEDIUM TYPE: 3.5" Diskette, 1.44 Mb MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: IBM P.C. DOS 5.0 SOFTWARE: Word Perfect 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/249,451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216/270
                 NUMBER OF SEQUENCES: 356
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 61, Application US/08809455
Patent No. 6090316
GENERAL INFORMATION:
APPLICANT: Vlasuk, George Philli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Necator americanus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 61 amino acids
TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: peptide
ORGANISM: Necator ame
US-09-249-451-61
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                                                                                                                                       CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
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                                                                                                                                                                                                         90071
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APPLICANT:
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19; Indels 10; Gaps
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                                                                                                                                                                             TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT TITLE OF INVENTION: PROTEIN
                                                                                                         Gansemans, Yannick Georges Jozef
Moyle, Matthew
  Stanssens, Patrick Eric Hugo
                        Messens, Joris Hilda Lieven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: 3.5" Diskette, 1.44 Mb MEDIUM TYPE: storage
                                        Lauwereys, Marc Josef
Laroche, Yves Rene
Jespers, Laurent Stephane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/809,455
FILING DATE: April 1997
APPLICATION NUMBER: PCT/US95/13231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/249,448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08/486,399
FILING DATE: June 5,1995
APPLICATION NUMBER: 08/486,399
FILING DATE: June 5,1995
APPLICATION NUMBER: 08/465,380
FILING DATE: June 5,1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5,1995
APPLICATION NUMBER: 08/461,965
FILING DATE: June 5,1995
APPLICATION NUMBER: 08/326,110
FILING DATE: June 5,1995
APPLICATION NUMBER: 08/326,110
FILING DATE: October 18, 1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Necator americanus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30,158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (213) 489-1600
                                                                                                                                                            Bergum, Peter W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: BIGGS, SUZANNE L. REGISTRATION NUMBER: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : 61 amino acids amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: peptide
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lvo
                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                              Suite 4700
                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                               CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                    U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
US-08-637-759B-400
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-249-448-61
                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                            APPLICANT:
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                                                APPLICANT:
                                                                     APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 CPANEEWRECGTPCEPKCNQPMP-----DICTMNCIVDVCQCKEGYKRHETKGCL 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12 CPSNEIFSRCDGRCQRFCPNVVPKPLCIKICAPGCV----CRLGYLRNKKKVCV 61
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                                                              APPLICANT: BEFGUM, PETER W.
TITLE OF INVENTION: NEMATODE-EXTRACTED SERINE PROTEASE
TITLE OF INVENTION: INHIBITORS AND ANTICOAGULANT
TITLE OF INVENTION: PROTEIN
NUMBER OF SOUTENCES: 356
CORRESPONDENCE ADDRESS:
Jespers, Laurent Stephane
Gansemans, Yannick Georges Jozef
Moyle, Matthew
                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/249,461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRICATION DATA:
APPLICATION NUMBER:
RILING DATE: APRIL 17, 1997
APPLICATION NUMBER: PCT/US95/13231
APPLICATION NUMBER: PCT/US95/13231
FILING DATE: October 17, 1995
APPLICATION NUMBER: 08/466, 399
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/466, 380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/466, 380
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461, 965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/461, 965
FILING DATE: June 5, 1995
APPLICATION NUMBER: 08/326, 110
FILING DATE: October 18, 1994
ATTORNEY AGENT INFORMATION:
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GENERAL INFORMATION:
APPLICANT: Vlasuk, George Phillip
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELERA: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 61:
SEQUENCE CHARACTERISTICS:
LENGTH: 61 amino acids
                                                                                                                                                                                                                 ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Necator americanus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30,158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: BIGGS, SUZANNE L. REGISTRATION NUMBER: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                               Los Angeles
: California
RY: U.S.A.
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                                                  APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                       STATE:
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ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: RPMS
TELECOMMUNICATION INFORMATION:
TELEPHONE: (404) 873-8794
TELEFAX: (404) 873-8795
INFORMATION FOR SEQ ID NO: 400:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: PABSEL, PATICA L.
REGISTRATION NUMBER: 31,284
REFERENCE/POCKET NUMBER: RPMS
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (404) 873-8794
TELEFAX: (404) 873-8795
INFORMATION FOR SEQ ID NO: 400
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17.48;
55.68;
                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/C
FILING DATE: 11-DEC-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12 CPSNEIFSRCDGRCQRFC 29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 55.65
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 47 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                        HYPOTHETICAL: NO -871-255
                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 30309-3450
COMPUTER READABLE FORM:
                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: George
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Georgia
                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: 11 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-871-355A-400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
US-09-201-945-400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/637,759B
FILING DATE: 03-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 400, Application US/08871355A
Sequence 400, Application US/08871355A
Patent No. 6015669
GENERAL INFORMATION:
TITLE OF INVENTION: Identification of Genes
NUMBER OF SEQUENCES: 501
CORRESPONDENCE ADDRESS:
                                                      APPLICANT: David William Holden
TITLE OF INVENTION: Identification of Genes
NUMBER OF SEQUENCES: 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/GB95/02875
FILING DATE: 11-DEC-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Patrea L. Pabst
STREET: 2800 One Atlantic Center
STREET: 1201 West Peachtree Street
                                                                                                                                    ADDRESSEE: Patrea L. Pabst
STREET: 2800 One Atlantic Center
STREET: 1201 West Peachtree Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DGCKET NUMBER: RPMS 101
TELECOMMUNICATION INFORMATION:
Sequence 400, Application US/08637759B
Patent No. 5876931
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              400:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (404) 873-8794
TELEFAX: (404) 873-8795
INFORMATION FOR SEQ ID NO: 400
SEQUENCE CHARACTERISTICS:
LENGTH: 47 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12 CPSNEIFSRCDGRCQRFC 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30 CPAGKPLSRCDGRCDEIC 47
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                                                                                                                    CORRESPONDENCE ADDRESS:
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Best Local Similarity
Matches 10; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
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ZIP: 30309-3450
                                                                                                                                                                                                                                                    30309-3450
                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 03 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Georgia
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                                                                                                                                                                                          CITY: Atlanta
STATE: Georgia
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STATE: Georgia
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                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; HYPOTHETICAL:
US-08-637-759B-400
                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/201,945
SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Identification of Genes NUMBER OF SEQUENCES: 501
CORRESPONDENCE ADDRESS:
ADDRESSEE: Patrea L. Pabst
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Mismatches
                                                                                                                                                                                                                                                                              RPMS 101 CON
                                    UMBER: US/08/871,355A
09-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Patrea L. Pabst
STREET: 2800 One Atlantic Center
STREET: 1201 West Peachtree Street
                                                                                                                                          PCT/GB95/02875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RPMS 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 400, Application US/09201945
Patent No. 634215
GENERAL INFORMATION:
APPLICANT: David William Holden
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/637,759
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                                                                                                                                                       Query Match 17.4%; Score 68; DB 4; Length 47; Best Local Similarity 55.6%; Pred. No. 1.1; Matches 10; Conservative 2; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                     Sequence 60, Application US/08465380
Patent No. 5863894
GENERAL INFORMATION:
APPLICANT: George P. Vlasuk, Patric H. Stanssens,
APPLICANT: Joris H.L. Mensens, Marc J. Lauwereys,
APPLICANT: Yannick G.J. Gansemans, Matthew Moyle,
APPLICANT: Peter W. Bergum
TITLE OF INVENTION: PROTEIN
TITLE OF INVENTION: PROTEIN
TITLE OF SEQUENCES: 356
CORRESPONDENCES: 356
ADDRESSEE: Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 17.4%; Score 68; DB 2; Length 58; Best Local Similarity 25.5%; Pred. No. 1.4; Matches "14; Conservative 7; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/465,380
FILING DATE: June 5, 1995
CLASSIFICATION: 530
RIOR APPLICATION 530
RIOR APPLICATION DATE: 08/326,110
FILING DATE: October 18, 1994
ATTORNEY/AGENT INFORMATION:
NAME: BIGGS, SUZANNE L.
REGISTRATION NUMBER: 30,158
REFERENCE/DOCKET NUMBER: 213/268
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEFAX: (213) 955-0440
TELEFAX: (213) 955-0410
TELEFAX: (213) 955-0410
TELEFAX: (213) 955-0410
TELEFAX: (213) 955-0410
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; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: Heligmosomoides polygyrus
US-08-465-380-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Lyon & Lyon
STREET: 613 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
                                                                                                                                                                                                                                  12 CPSNEIFSRCDGRCQRFC 29
                                                                                                                                                                                                                                                             30 CPAGKPLSRCDGRCDEIC 47
LENGTH: 47 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 58 amino acids TYPE: amino acid
                TYPE: amino acid
STRANDEDNESS: single
                                                                       MOLECULE TYPE: protein; HYPOTHETICAL: NO US-09-201-945-400
                                                           linear
                                                           TOPOLOGY:
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US-08-465-380-60
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